

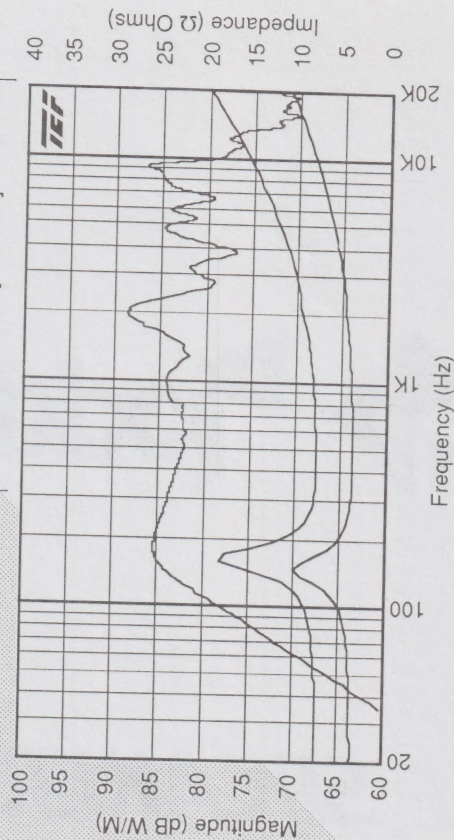
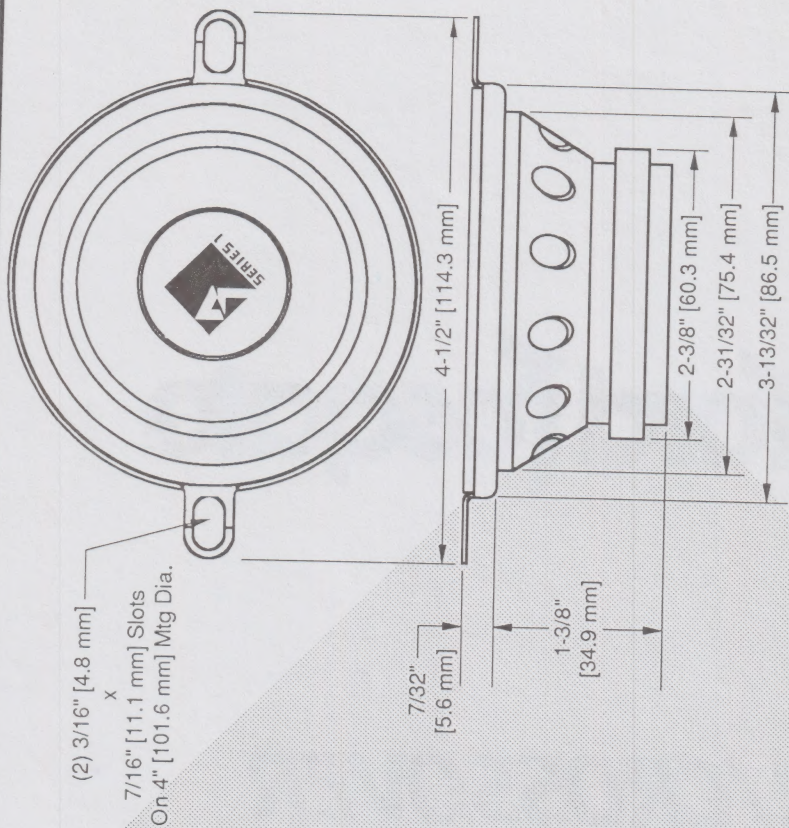


***SPEAKER/CROSSOVER  
TECHNICAL DATA***

**Rockford  
Corporation**

613 South  
Rockford Drive  
Tempe  
Arizona  
85281  
(602) 967-3565





TECHNICAL DATA	SPPR-34	SPPR-38
Nominal Diameter	3.50 in [88.9 mm]	3.50 in [88.9 mm]
Magnet Weight	2.98 oz [84.6 g]	2.98 oz [84.6 g]
Frequency Range	152 - 12,000 Hz	155 - 12,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.5Ω	7.0Ω
Resonance Frequency (fs)	152 Hz	155 Hz
Mechanical Q Factor (Qms)	3.04	3.99
Electrical Q Factor (Qes)	1.74	2.29
Total Q Factor (Qts)	1.11	1.46
Effective Cone Area (Sd)	6.05 in <sup>2</sup> [0.0039 m <sup>2</sup> ]	6.05 in <sup>2</sup> [0.0039 m <sup>2</sup> ]
Equivalent Air Volume (Vas)	0.035 ft <sup>3</sup> [1.0 L]	0.035 ft <sup>3</sup> [1.0 L]
Compliance (Cms)	0.00050 m/N	0.00050 m/N
Moving Mass (Mms)	0.08 oz [2.2 g]	0.07 oz [2.1 g]
Voice Coil Diameter	0.75 in [19.1 mm]	0.75 in [19.1 mm]
Voice Coil Winding Height	0.18 in [4.6 mm]	0.18 in [4.6 mm]
Voice Coil Former Material	3.5 Mil Aluminum	3.5 Mil Aluminum
Voice Coil Inductance	0.15 mH	0.24 mH
Force Factor (Bl)	2.1 Tm	2.5 Tm
Linear Excursion (Xmax)	-0.01 in [-0.3 mm]	-0.01 in [-0.3 mm]
Sensitivity (SPL)	85.0 dB W/m	85.0 dB W/m
Operating Power (PE)	30 W	30 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



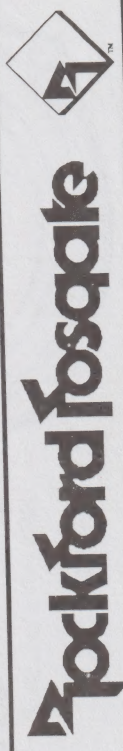
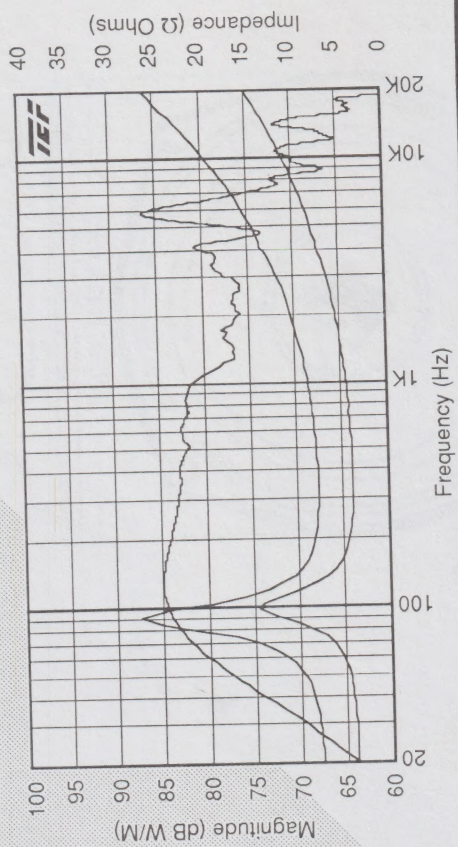
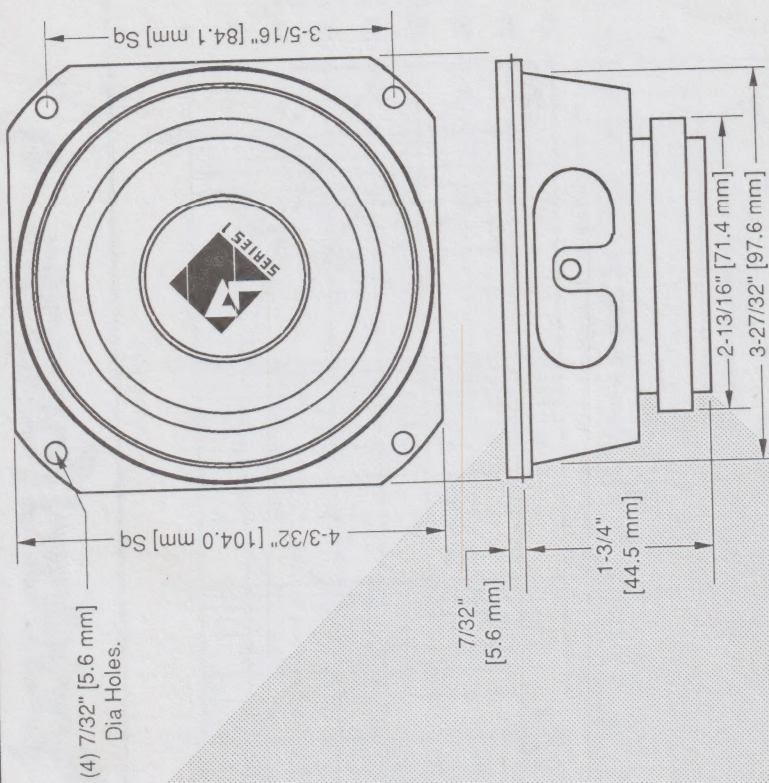
**Rockford Fosgate**

PART No.: <b>SPPR-34</b>	PART NAME: 3.5" Series One Midrange
<b>SPPR-38</b>	TOLERANCE: N/A
RELEASE: #1 (10-30-90)	SCALE: N.T.S.
	DRWN BY: <i>BBW</i>
	APPR BY: <i>Chumel</i>



TECHNICAL DATA	SPPR-44	SPPR-48
Nominal Diameter	4.00 in [101.6 mm]	4.00 in [101.6 mm]
Magnet Weight	4.80 oz [136.2 g]	4.80 oz [136.2 g]
Frequency Range	79 - 7,000 Hz	90 - 7,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.5Ω	7.0Ω
Resonance Frequency (fs)	79 Hz	90 Hz
Mechanical Q Factor (QMS)	3.21	3.34
Electrical Q Factor (QES)	0.94	1.23
Total Q Factor (QTS)	0.73	0.90
Effective Cone Area (SD)	9.15 in^2 [0.0059 m^2]	9.15 in^2 [0.0059 m^2]
Equivalent Air Volume (VAS)	0.106 ft^3 [3.0 L]	0.106 ft^3 [3.0 L]
Compliance (CMS)	0.00069 m/N	0.00069 m/N
Moving Mass (MMS)	0.21 oz [5.9 g]	0.16 oz [4.5 g]
Voice Coil Diameter	1.00 in [25.4 mm]	1.00 in [25.4 mm]
Voice Coil Winding Height	0.27 in [6.9 mm]	0.27 in [6.9 mm]
Voice Coil Former Material	3.5 Mil Aluminum	3.5 Mil Aluminum
Voice Coil Inductance	0.32 mH	0.40 mH
Force Factor (Bl)	3.3 Tm	3.8 Tm
Linear Excursion (Xmax)	-0.04 in [-1.1 mm]	-0.04 in [-1.1 mm]
Sensitivity (SPL)	84.0 dB W/m	84.0 dB W/m
Operating Power (PE)	40 W	40 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit

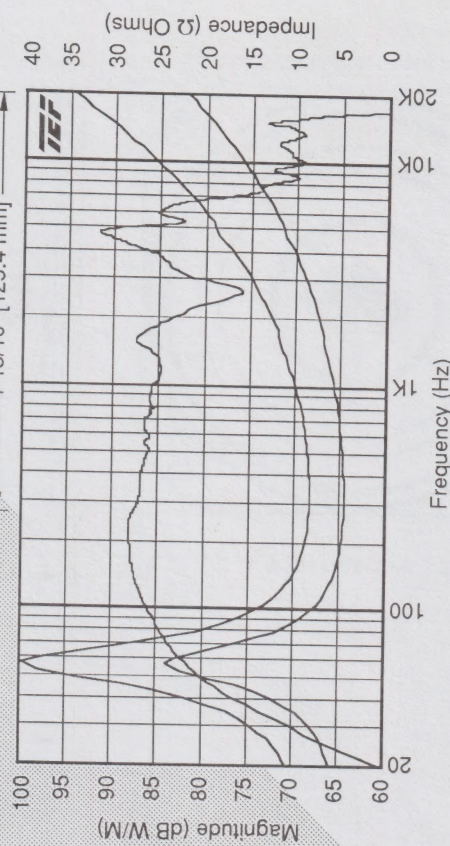
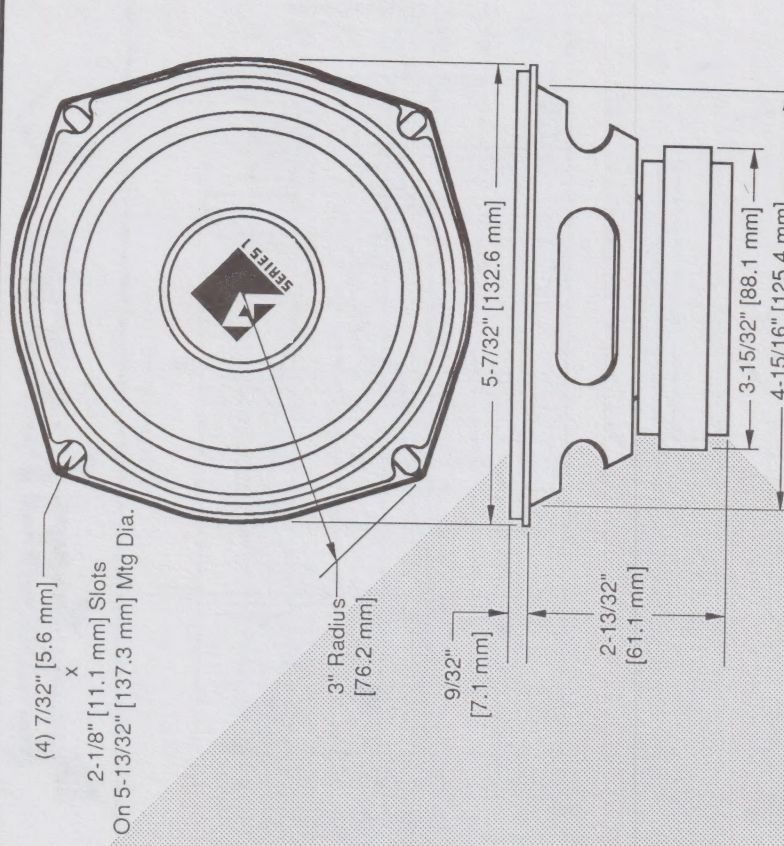


PART No:	SPPR-44	PART NAME:	4" Series One Midrange
RELEASE:	#1 (10-30-90)	TOLERANCE:	N/A
		SCALE:	N.T.S.
		DRWN BY:	BLW
		APPR BY:	Chm

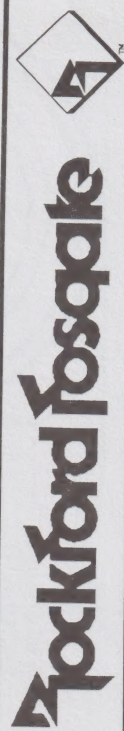


TECHNICAL DATA	SPPR-54	SPPR-58
Nominal Diameter	5.25 in [133.4 mm]	5.25 in [133.4 mm]
Magnet Weight	12.00 oz [340.5 g]	12.00 oz [340.5 g]
Frequency Range	55 - 7,000 Hz	55 - 7,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	4.2Ω	8.3Ω
Resonance Frequency (fs)	55 Hz	57 Hz
Mechanical Q Factor (QMS)	2.43	2.51
Electrical Q Factor (QES)	0.47	0.64
Total Q Factor (QTS)	0.40	0.51
Effective Cone Area (Sd)	15.35 in^2 [0.0099 m^2]	15.35 in^2 [0.0099 m^2]
Equivalent Air Volume (Vas)	0.389 ft^3 [11.0 L]	0.389 ft^3 [11.0 L]
Compliance (CMS)	0.00080 m/N	0.00080 m/N
Moving Mass (MMS)	0.37 oz [10.5 g]	0.35 oz [9.9 g]
Voice Coil Diameter	1.00 in [25.4 mm]	1.00 in [25.4 mm]
Voice Coil Winding Height	0.46 in [11.7 mm]	0.46 in [11.7 mm]
Voice Coil Former Material	3.5 Mil Aluminum	3.5 Mil Aluminum
Voice Coil Inductance	0.38 mH	0.58 mH
Force Factor (Bl)	5.6 Tm	6.8 Tm
Linear Excursion (Xmax)	0.11 in [2.8 mm]	0.11 in [2.8 mm]
Sensitivity (SPL)	88.0 dB W/m	88.0 dB W/m
Operating Power (PE)	50 W	50 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



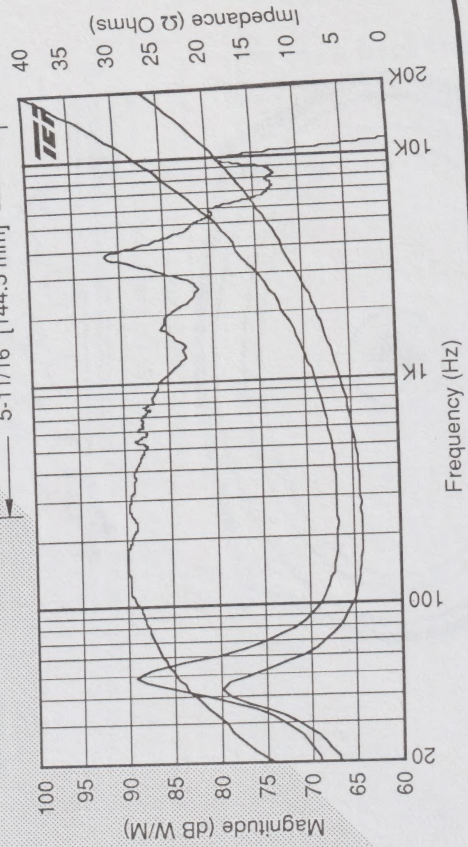
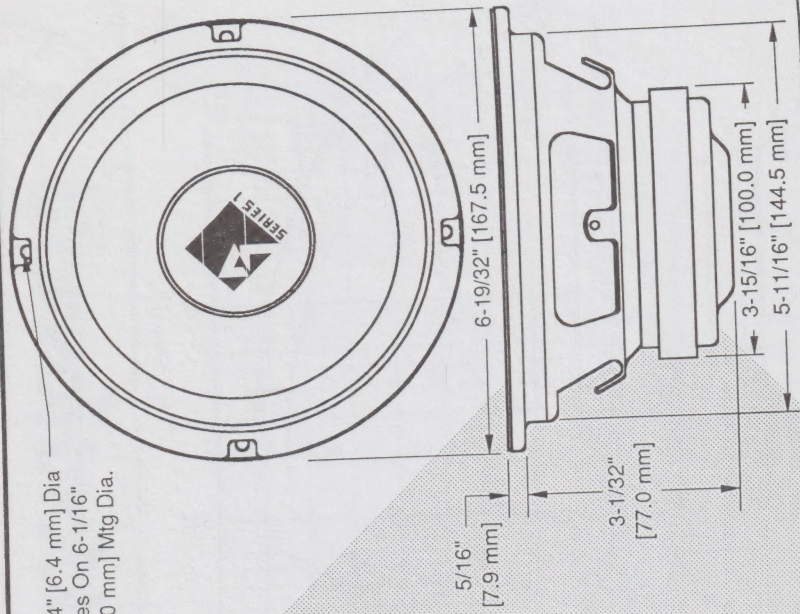
PART NO:	SPPR-54	PART NAME:	5.25" Series One Midbass
RELEASE:	#1 (10-30-90)	TOLERANCE:	N/A
		SCALE:	N.T.S.
		DRWN BY:	EBW
		APPR BY:	Chumel





TECHNICAL DATA		SPPR-64	SPPR-68
Nominal Diameter		6.50 in [165.1 mm]	6.50 in [165.1 mm]
Magnet Weight		14.00 oz [397.6 g]	14.00 oz [397.6 g]
Frequency Range		46 - 5,000 Hz	50 - 5,000 Hz
Nominal Impedance		4Ω	8Ω
DC Resistance (R <sub>E</sub> )		3.7Ω	7.3Ω
Resonance Frequency (f <sub>s</sub> )		46 Hz	50 Hz
Mechanical Q Factor (Q <sub>MS</sub> )		2.44	2.58
Electrical Q Factor (Q <sub>ES</sub> )		0.53	0.75
Total Q Factor (Q <sub>TS</sub> )		0.43	0.58
Effective Cone Area (S <sub>D</sub> )		21.08 in <sup>2</sup> [0.0136 m <sup>2</sup> ]	21.08 in <sup>2</sup> [0.0136 m <sup>2</sup> ]
Equivalent Air Volume (V <sub>AS</sub> )		0.989 ft <sup>3</sup> [28.0 L]	0.989 ft <sup>3</sup> [28.0 L]
Compliance (C <sub>MS</sub> )		0.00107 m/N	0.00107 m/N
Moving Mass (M <sub>MS</sub> )		0.39 oz [11.0 g]	0.34 oz [9.5 g]
Voice Coil Diameter		1.25 in [31.8 mm]	1.25 in [31.8 mm]
Voice Coil Winding Height		0.62 in [15.7 mm]	0.62 in [15.7 mm]
Voice Coil Former Material		3.5 Mil Aluminum	3.5 Mil Aluminum
Voice Coil Inductance		0.56 mH	0.71 mH
Force Factor (Bl)		4.7 Tm	5.4 Tm
Linear Excursion (X <sub>max</sub> )		0.19 in [4.7 mm]	0.19 in [4.7 mm]
Sensitivity (SPL)		89 dB W/m	89 dB W/m
Operating Power (P <sub>E</sub> )		70 W	70 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



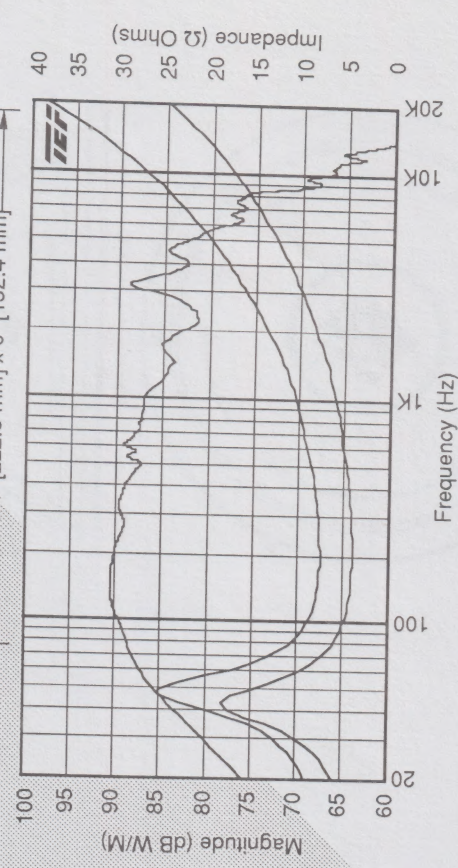
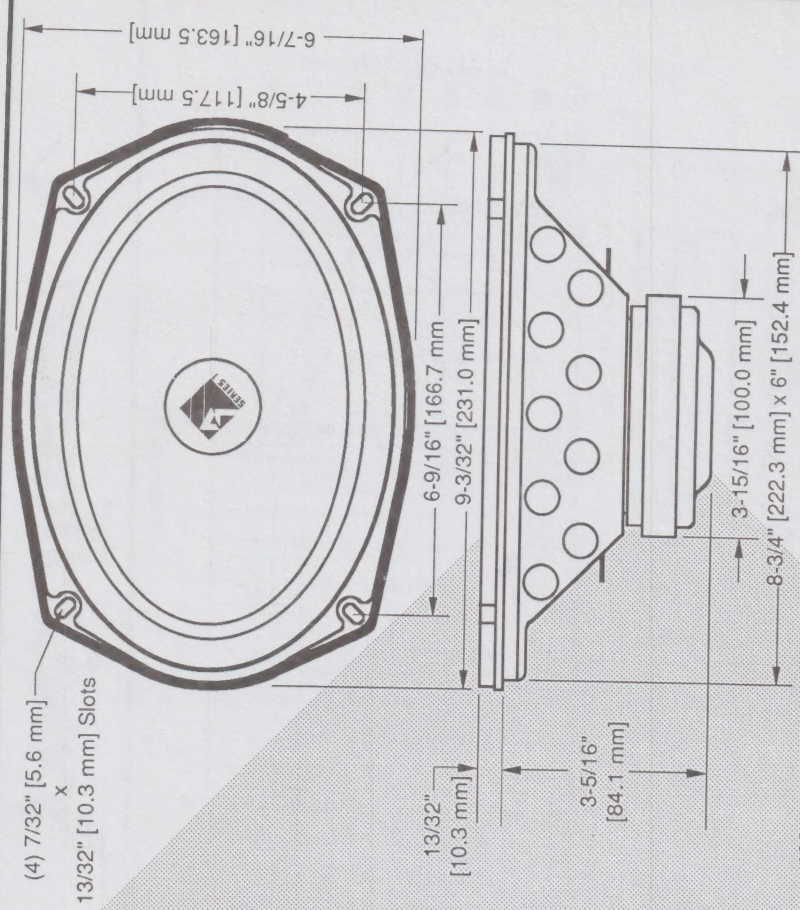
# Rockford Fosgate

PART No.: SPPR-64	PART NAME: 6.5" Series One Midbass
RELEASE: #2 (10-29-90)	TOLERANCE: N/A
	SCALE: N.T.S.
	DRWN BY: <i>[Signature]</i>
	APPR BY: <i>[Signature]</i>



TECHNICAL DATA	SPPR-694	SPPR-698
Nominal Diameter	6x9 in [152.4x228.6 mm]	6x9 in [152.4x228.6 mm]
Magnet Weight	14.00 oz [397.6 g]	14.00 oz [397.6 g]
Frequency Range	42 - 4,500 Hz	44 - 4,500 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.5Ω	7.0Ω
Resonance Frequency (fs)	42 Hz	44 Hz
Mechanical Q Factor (QMS)	2.74	2.28
Electrical Q Factor (QES)	0.60	0.79
Total Q Factor (QTS)	0.49	0.59
Effective Cone Area (Sd)	34.10 in^2 [0.0220 m^2]	34.10 in^2 [0.0220 m^2]
Equivalent Air Volume (Vas)	1.730 ft^3 [49.0 L]	1.730 ft^3 [49.0 L]
Compliance (CMS)	0.00072 m/N	0.00072 m/N
Moving Mass (MMS)	0.70 oz [19.9 g]	0.64 oz [18.2 g]
Voice Coil Diameter	1.50 in [38.1 mm]	1.50 in [38.1 mm]
Voice Coil Winding Height	0.49 in [12.5 mm]	0.49 in [12.5 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	0.48 mH	0.69 mH
Force Factor (Bl)	5.6 Tm	6.7 Tm
Linear Excursion (Xmax)	0.12 in [3.1 mm]	0.12 in [3.1 mm]
Sensitivity (SPL)	90.0 dB W/m	90.0 dB W/m
Operating Power (PE)	70 W	70 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit

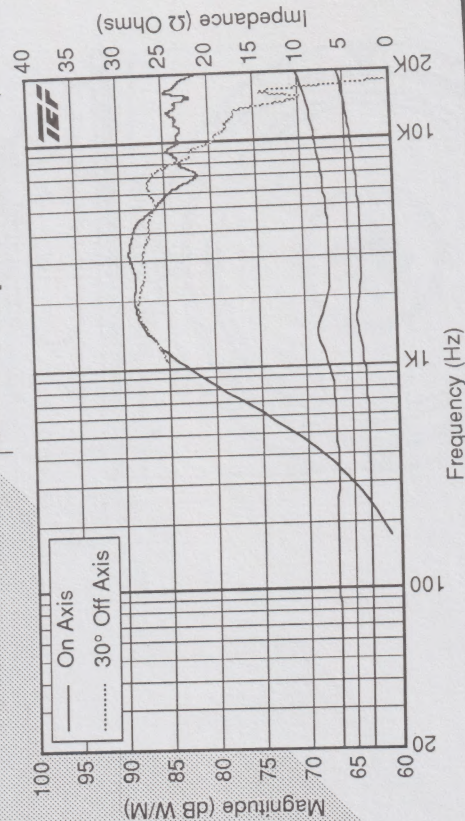
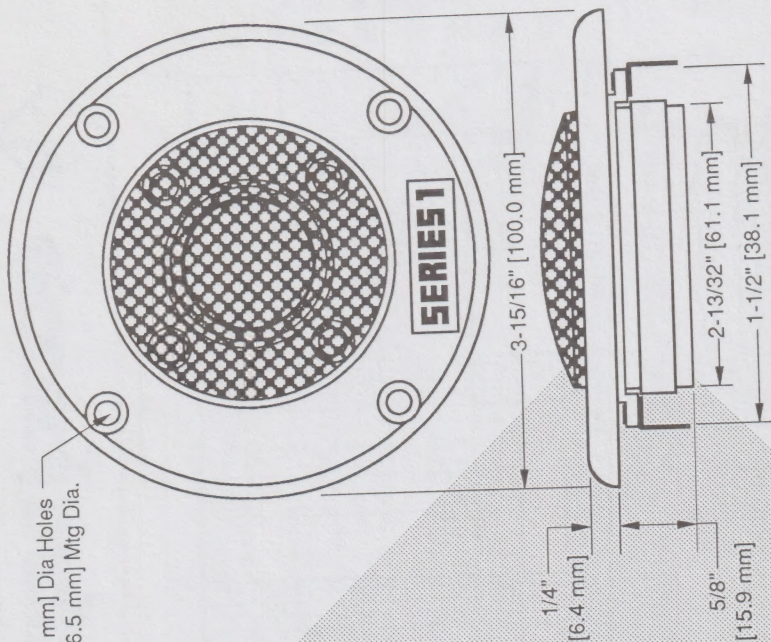


PART NO.:	SPPR-694	PART NAME:	5x9" Series One Woofer
RELEASE:	#1 (10-30-90)	TOLERANCE:	N/A
		SCALE:	N.T.S.
		DRWN BY:	CHM
		APPR BY:	CHM



TECHNICAL DATA	SPT-04R	SPT-08R
Nominal Diameter	1.00 in [25.4 mm]	1.00 in [25.4 mm]
Magnet Weight	2.80 oz [79.5 g]	42.80 oz [79.5 g]
Frequency Range	2,500 - 20,000 Hz	2,500 - 20,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.3Ω	6.6Ω
Resonance Frequency (fs)	1,300 Hz	1,300 Hz
Mechanical Q Factor (Qms)	1.99	2.52
Electrical Q Factor (Qes)	4.34	4.84
Total Q Factor (Qts)	1.36	1.66
Effective Cone Area (Sp)	N/A	N/A
Equivalent Air Volume (Vas)	N/A	N/A
Compliance (Cms)	N/A	N/A
Moving Mass (Mms)	N/A	N/A
Voice Coil Diameter	1.00 in [25.4 mm]	1.00 in [25.4 mm]
Voice Coil Winding Height	0.14 in [3.5 mm]	0.14 in [3.5 mm]
Voice Coil Former Material	2 Mil Polyimide Film	2 Mil Polyimide Film
Voice Coil Inductance	0.30 mH	0.37 mH
Force Factor (Bl)	N/A	N/A
Linear Excursion (Xmax)	N/A	N/A
Sensitivity (SPL)	85.0 dB W/m	85.0 dB W/m
Operating Power (PE)	50 W *	50 W *

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
 \* Power Ratings (PE) Established With Recommended Filter Network  
 Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
 Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



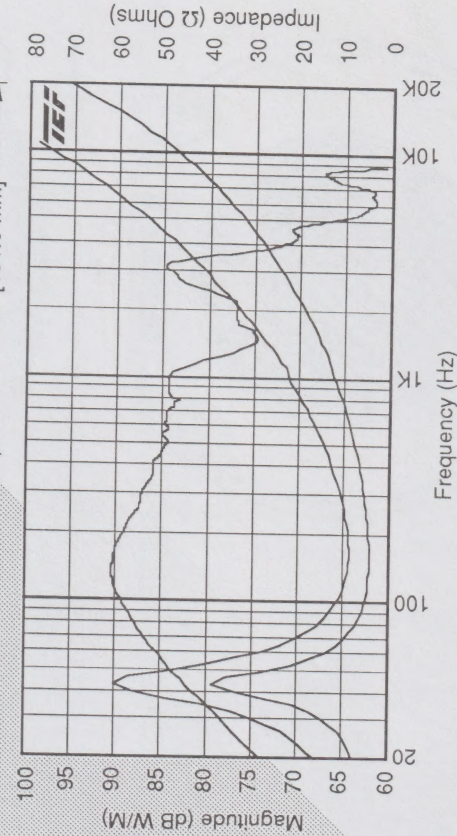
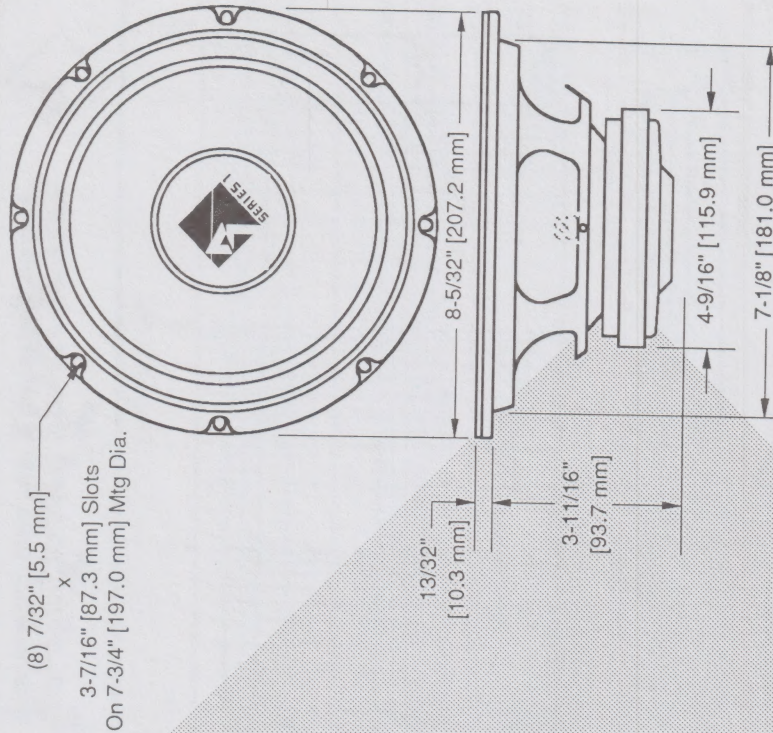
Rockford Fosgate

PART No.:	SPT-04R	PART NAME:	1" Series One Soft Dome Tweeter
RELEASE:	#2 (10-26-90)	TOLERANCE:	N/A
		SCALE:	N.T.S.
		DRWN BY:	PLW
		APPR BY:	Chud

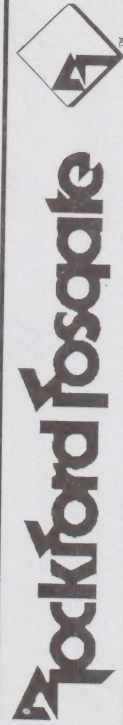


TECHNICAL DATA	SPPR-84	SPPR-88
Nominal Diameter	8.00 in [203.2 mm]	8.00 in [203.2 mm]
Magnet Weight	18.00 oz [511.2 g]	18.00 oz [511.2 g]
Frequency Range	40 - 1,200 Hz	43 - 1,200 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.6Ω	7.1Ω
Resonance Frequency (fs)	40 Hz	43 Hz
Mechanical Q Factor (QMS)	3.67	2.89
Electrical Q Factor (QES)	0.34	0.37
Total Q Factor (QTS)	0.31	0.33
Effective Cone Area (Sp)	34.10 in <sup>2</sup> [0.0220 m <sup>2</sup> ]	34.10 in <sup>2</sup> [0.0220 m <sup>2</sup> ]
Equivalent Air Volume (VAS)	1.271 ft <sup>3</sup> [36.0 L]	1.271 ft <sup>3</sup> [36.0 L]
Compliance (CMS)	0.00053 m/N	0.00053 m/N
Moving Mass (MMS)	1.06 oz [30.1 g]	0.93 oz [26.5 g]
Voice Coil Diameter	1.5 in [38.1 mm]	1.5 in [38.1 mm]
Voice Coil Winding Height	0.68 in [17.3 mm]	0.68 in [17.3 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	1.49 mH	2.40 mH
Force Factor (Bl)	8.9 Tm	11.7 Tm
Linear Excursion (Xmax)	0.18 in [4.7 mm]	0.18 in [4.7 mm]
Sensitivity (SPL)	90.0 dB W/m	90.0 dB W/m
Operating Power (PE)	80 W	80 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



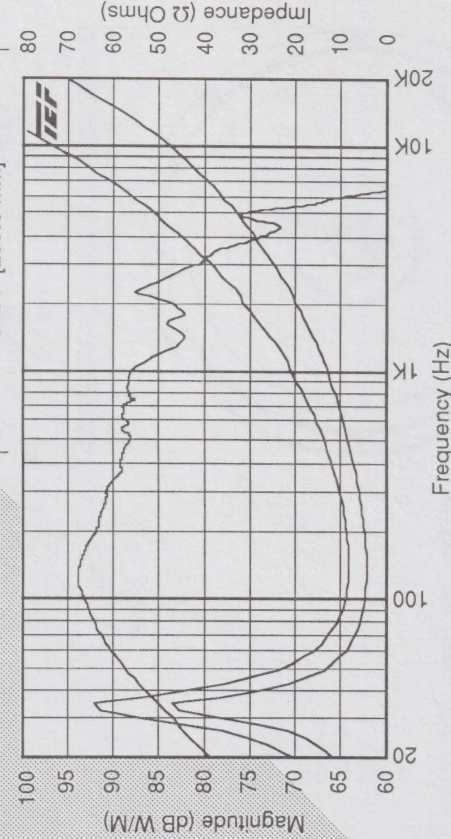
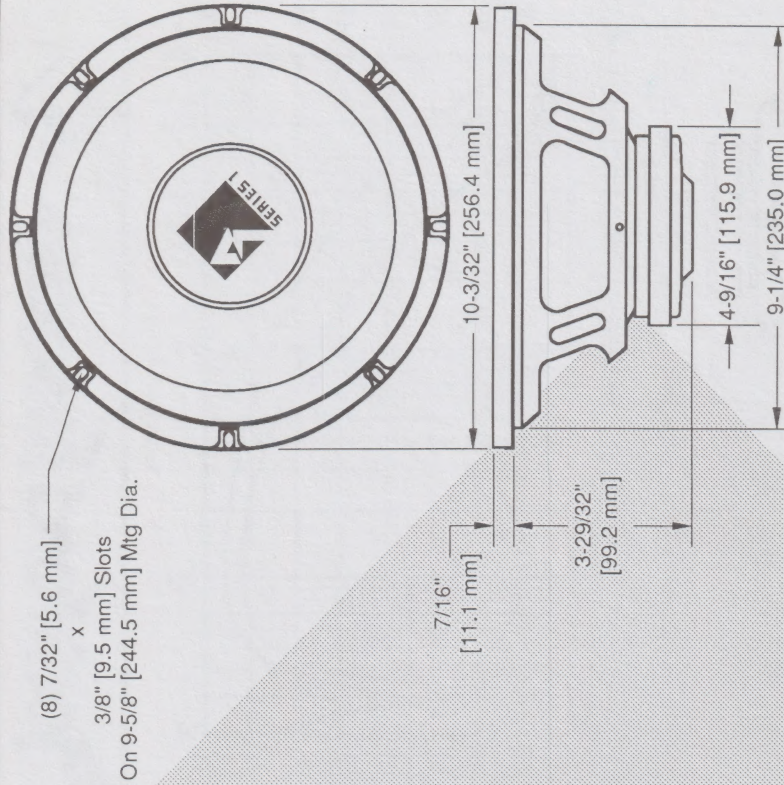
PART No.: SPPR-84	PART NAME: 8" Series One Woofer
SPPR-88	TOLERANCE: N/A
RELEASE: #2 (10-29-90)	SCALE: N.T.S.
	APP BY: <i>Chm</i>





TECHNICAL DATA	SPPR-104	SPPR-108
Nominal Diameter	10.00 in [254.0 mm]	10.00 in [254.0 mm]
Magnet Weight	18.00 oz [511.2 g]	18.00 oz [511.2 g]
Frequency Range	35 - 3,000 Hz	35 - 3,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (R <sub>E</sub> )	3.8Ω	7.5Ω
Resonance Frequency (f <sub>s</sub> )	34 Hz	35 Hz
Mechanical Q Factor (Q <sub>MS</sub> )	3.75	3.28
Electrical Q Factor (Q <sub>ES</sub> )	0.37	0.41
Total Q Factor (Q <sub>TS</sub> )	0.34	0.37
Effective Cone Area (S <sub>d</sub> )	55.49 in <sup>2</sup> [0.0358 m <sup>2</sup> ]	55.49 in <sup>2</sup> [0.0358 m <sup>2</sup> ]
Equivalent Air Volume (V <sub>AS</sub> )	3.037 ft <sup>3</sup> [86.0 L]	3.037 ft <sup>3</sup> [86.0 L]
Compliance (C <sub>MS</sub> )	0.00047 m/N	0.00047 m/N
Moving Mass (M <sub>MS</sub> )	1.66 oz [47.2 g]	1.55 oz [44.0 g]
Voice Coil Diameter	1.50 in [38.1 mm]	1.50 in [38.1 mm]
Voice Coil Winding Height	0.72 in [18.3 mm]	0.72 in [18.3 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	1.58 mH	2.36 mH
Force Factor (Bl)	10.1 Tm	13.3 Tm
Linear Excursion (X <sub>max</sub> )	0.20 in [5.2 mm]	0.20 in [5.2 mm]
Sensitivity (SPL)	91 dB W/m	91 dB W/m
Operating Power (P <sub>E</sub> )	80 W	80 W

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Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit

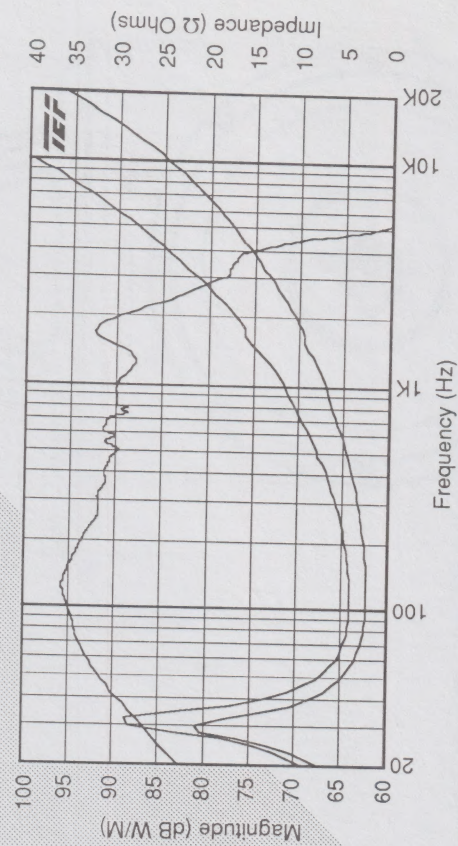
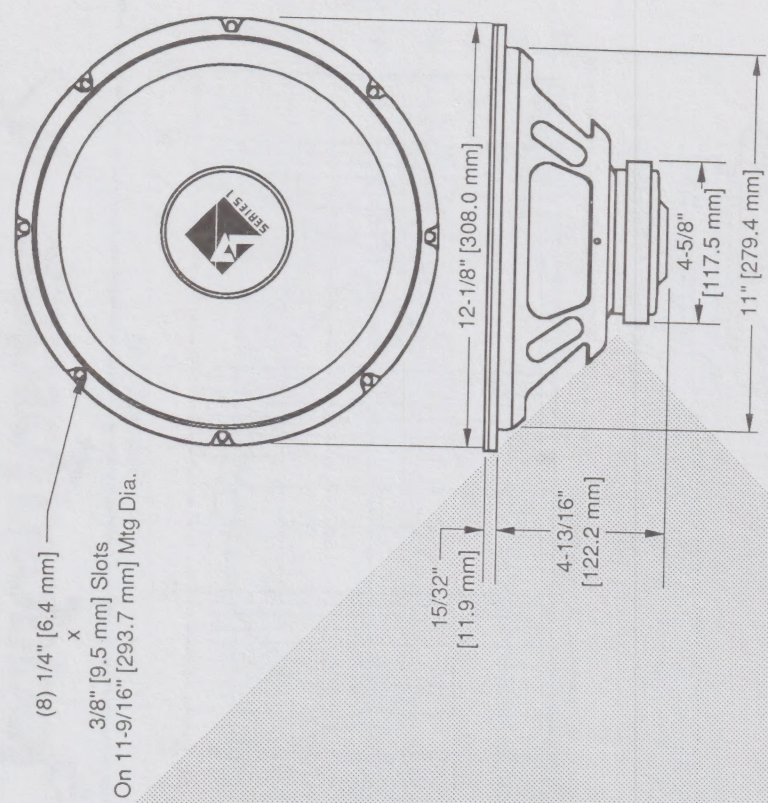


PART No.:	SPPR-104	PART NAME:	10" Series One Woofer
RELEASE:	#2 (10-29-90)	TOLERANCE:	N/A
		SCALE:	N.T.S.
		DRWN BY:	BBW
		APPR BY:	Amel



TECHNICAL DATA	SPPR-124	SPPR-128
Nominal Diameter	12.00 in [304.8 mm]	12.00 in [304.8 mm]
Magnet Weight	28.00 oz [795.2 g]	28.00 oz [795.2 g]
Frequency Range	29 - 2,500 Hz	30 - 2,500 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.7Ω	7.3Ω
Resonance Frequency (fs)	29 Hz	30 Hz
Mechanical Q Factor (QMS)	3.33	4.02
Electrical Q Factor (QES)	0.33	0.51
Total Q Factor (QTS)	0.30	0.45
Effective Cone Area (Sd)	84.48 in^2 [0.0545 m^2]	84.48 in^2 [0.0545 m^2]
Equivalent Air Volume (Vas)	6.498 ft^3 [184.0 L]	6.498 ft^3 [184.0 L]
Compliance (CMS)	0.00044 m/N	0.00044 m/N
Moving Mass (MMS)	2.44 oz [69.1 g]	2.31 oz [65.4 g]
Voice Coil Diameter	1.50 in [38.1 mm]	1.50 in [38.1 mm]
Voice Coil Winding Height	0.70 in [17.9 mm]	0.70 in [17.9 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	1.65 mH	2.75 mH
Force Factor (Bl)	11.8 Tm	13.3 Tm
Linear Excursion (Xmax)	0.20 in [5.1 mm]	0.20 in [5.1 mm]
Sensitivity (SPL)	93.0 dB W/m	93 dB W/m
Operating Power (PE)	80 W	80.0 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit

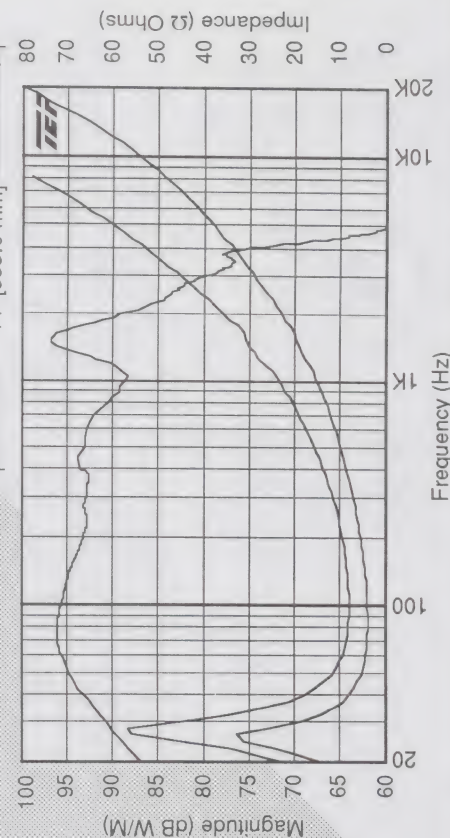
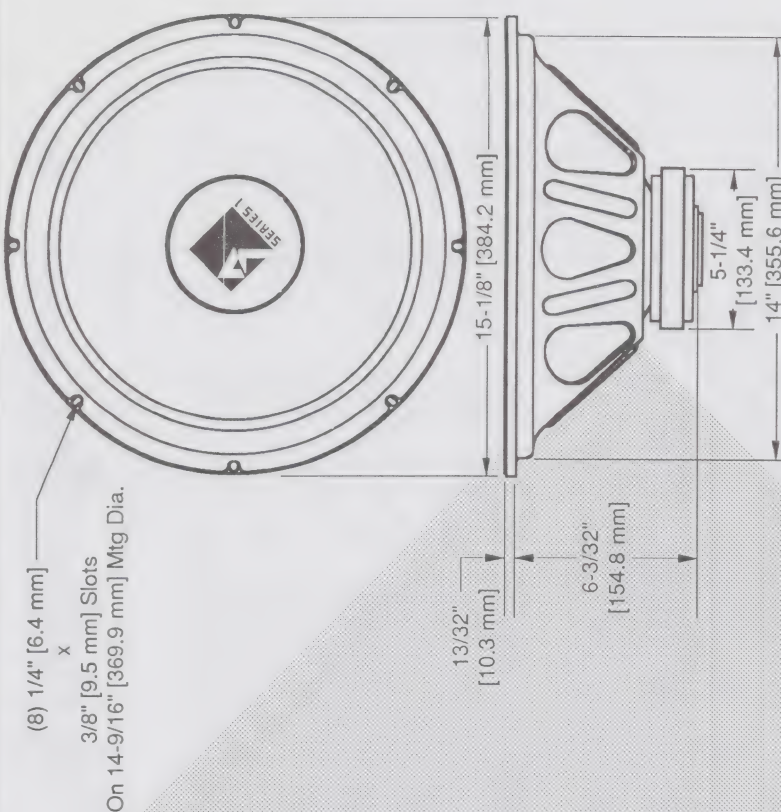


PART No.: SPPR-124	PART NAME: 12" Series One Woofer
SPPR-128	TOLERANCE: N/A
RELEASE: #1 (11-1-90)	SCALE: N.T.S.
	APPR BY: <i>Chum</i>



TECHNICAL DATA	SPPR-154	SPPR-158
Nominal Diameter	15.00 in [381.0 mm]	15.00 in [381.0 mm]
Magnet Weight	38.00 oz [1079.2 g]	38.00 oz [1079.2 g]
Frequency Range	25 - 2,500 Hz	26 - 2,500 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance ( <i>R<sub>E</sub></i> )	3.4Ω	6.7Ω
Resonance Frequency ( <i>f<sub>s</sub></i> )	25 Hz	26 Hz
Mechanical Q Factor ( <i>Q<sub>MS</sub></i> )	4.45	3.54
Electrical Q Factor ( <i>Q<sub>ES</sub></i> )	0.45	0.51
Total Q Factor ( <i>Q<sub>TS</sub></i> )	0.41	0.44
Effective Cone Area ( <i>S<sub>d</sub></i> )	134.54 in <sup>2</sup> [0.0868 m <sup>2</sup> ]	134.54 in <sup>2</sup> [0.0868 m <sup>2</sup> ]
Equivalent Air Volume ( <i>V<sub>AS</sub></i> )	13.102 ft <sup>3</sup> [371.0 L]	13.102 ft <sup>3</sup> [371.0 L]
Compliance ( <i>C<sub>MS</sub></i> )	0.00035 m/N	0.00035 m/N
Moving Mass ( <i>M<sub>MS</sub></i> )	4.11 oz [116.5 g]	3.91 oz [110.8 g]
Voice Coil Diameter	2.00 in [50.8 mm]	2.00 in [50.8 mm]
Voice Coil Winding Height	0.68 in [17.2 mm]	0.68 in [17.2 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	1.95 mH	2.93 mH
Force Factor ( <i>Bl</i> )	11.7 Tm	15.4 Tm
Linear Excursion ( <i>X<sub>max</sub></i> )	0.23 in [5.9 mm]	0.23 in [5.9 mm]
Sensitivity ( <i>SPL</i> )	93.0 dB W/m	93.0 dB W/m
Operating Power ( <i>P<sub>E</sub></i> )	100 W	100 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



Rockford Fosgate

PART No.: SPPR-154

PART NAME: 15" Series One Woofer

TOLERANCE: N/A

RELEASE: #2 (10-29-90)

SCALE: N.T.S.

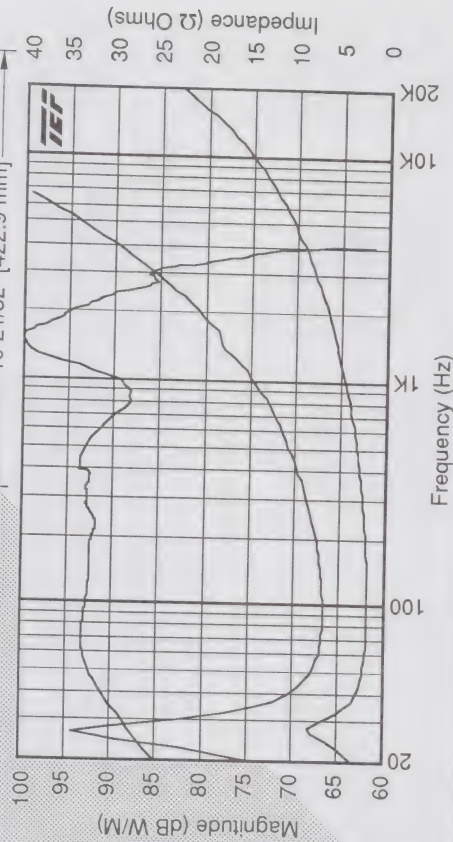
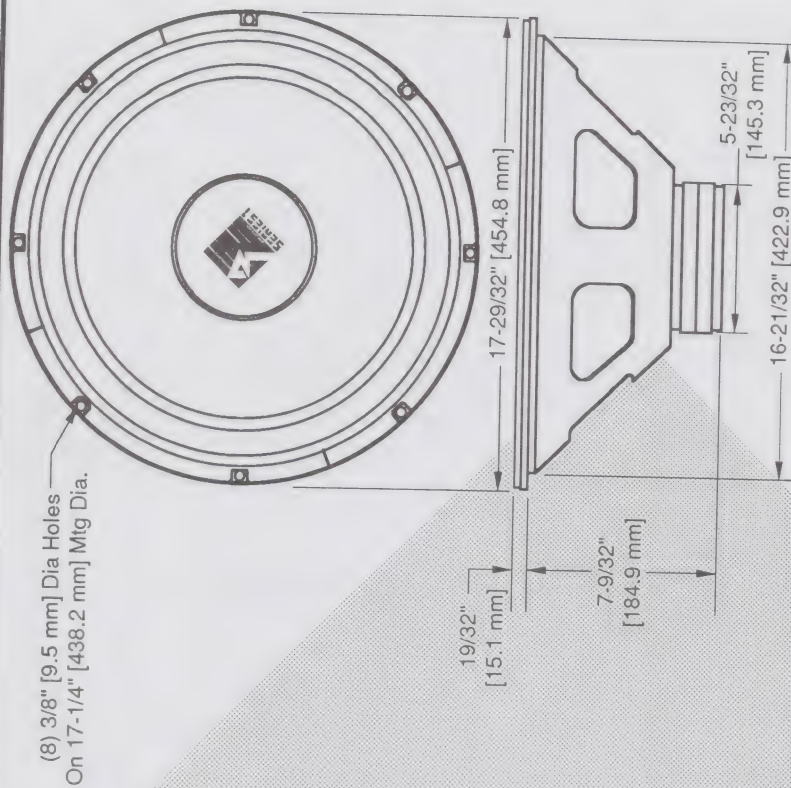
DRWN BY: *BLW*

APPR BY: *Chund*



TECHNICAL DATA	SPPR-184	SPPR-188
Nominal Diameter	18.00 in [457.2 mm]	18.00 in [457.2 mm]
Magnet Weight	64.00 oz [1817.6 g]	64.00 oz [1817.6 g]
Frequency Range	26 - 2,500 Hz	27 - 2,500 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.0Ω	6.1Ω
Resonance Frequency (fs)	26 Hz	27 Hz
Mechanical Q Factor (QMS)	3.70	4.09
Electrical Q Factor (QES)	0.66	0.97
Total Q Factor (QTS)	0.56	0.79
Effective Cone Area (SD)	174.38 in <sup>2</sup> [0.1125 m <sup>2</sup> ]	174.38 in <sup>2</sup> [0.1125 m <sup>2</sup> ]
Equivalent Air Volume (VAS)	13.667 ft <sup>3</sup> [387.0 L]	13.667 ft <sup>3</sup> [387.0 L]
Compliance (CMS)	0.00022 m/N	0.00022 m/N
Moving Mass (MMS)	6.14 oz [174.2 g]	5.74 oz [162.6 g]
Voice Coil Diameter	2.50 in [63.5 mm]	2.50 in [63.5 mm]
Voice Coil Winding Height	1.00 in [25.4 mm]	1.00 in [25.4 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	0.95 mH	1.56 mH
Force Factor (Bl)	11.4 Tm	13.1 Tm
Linear Excursion (Xmax)	0.31 in [8.0 mm]	0.31 in [8.0 mm]
Sensitivity (SPL)	92.0 dB W/m	92.0 dB W/m
Operating Power (PE)	100 W	100 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



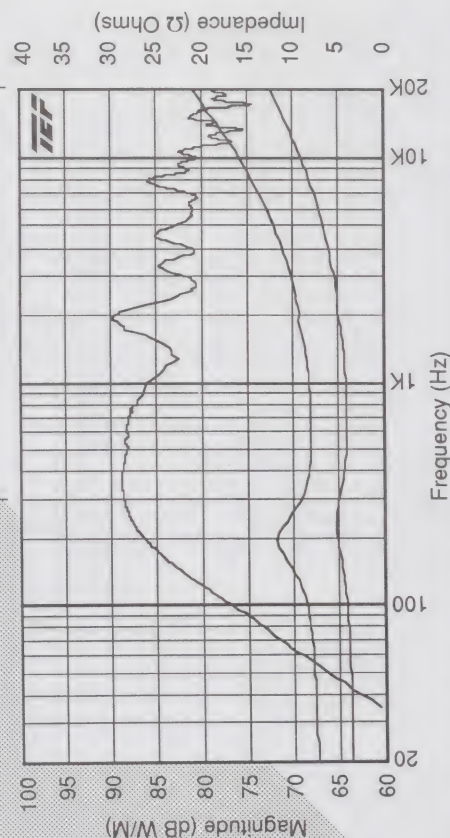
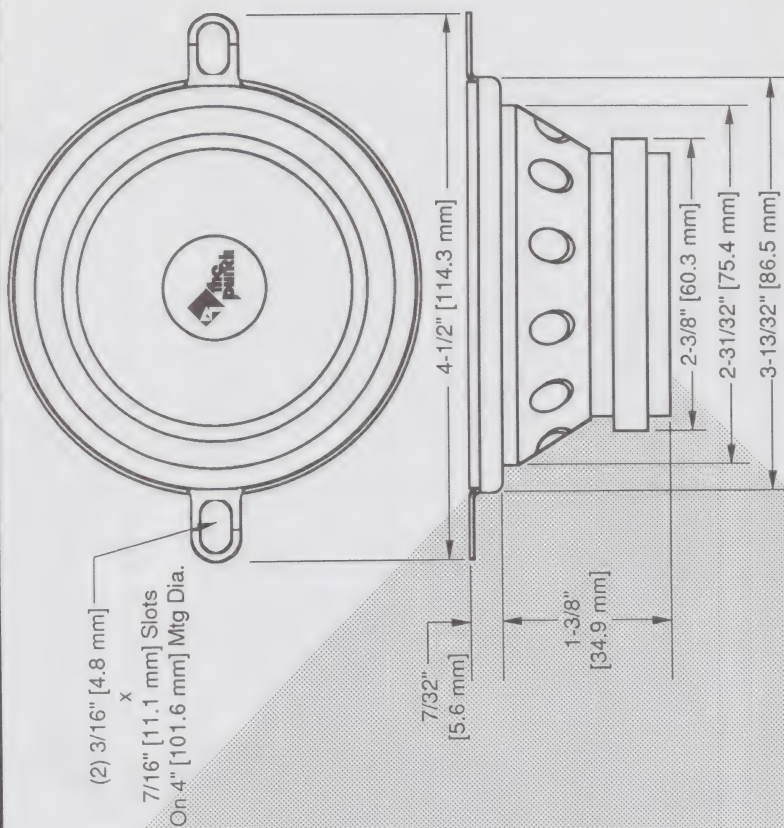
**Packford Fosgate**

PART No.: <b>SPPR-184</b>	PART NAME: 18" Series One Woofer
<b>SPPR-188</b>	TOLERANCE: N/A
RELEASE: #1 (12-10-90)	SCALE: N.T.S.
	DRWN BY: <i>Blu</i>
	APPR BY: <i>Chund</i>



TECHNICAL DATA	SP-34	SP-38
Nominal Diameter	3.50 in [88.9 mm]	3.50 in [88.9 mm]
Magnet Weight	2.98 oz [84.6 g]	2.98 oz [84.6 g]
Frequency Range	205 - 20,000 Hz	206 - 20,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.6Ω	7.2Ω
Resonance Frequency (fs)	205 Hz	206 Hz
Mechanical Q Factor (QMS)	1.36	1.55
Electrical Q Factor (QES)	2.14	3.25
Total Q Factor (QTS)	0.83	1.05
Effective Cone Area (Sp)	6.05 in <sup>2</sup> [0.0039 m <sup>2</sup> ]	6.05 in <sup>2</sup> [0.0039 m <sup>2</sup> ]
Equivalent Air Volume (VAS)	0.035 ft <sup>3</sup> [1.0 L]	0.035 ft <sup>3</sup> [1.0 L]
Compliance (CMS)	0.00040 m/N	0.00040 m/N
Moving Mass (MMS)	0.05 oz [1.5 g]	0.06 oz [1.7 g]
Voice Coil Diameter	0.75 in [19.1 mm]	0.75 in [19.1 mm]
Voice Coil Winding Height	0.18 in [4.6 mm]	0.18 in [4.6 mm]
Voice Coil Former Material	3.5 Mil Aluminum	3.5 Mil Aluminum
Voice Coil Inductance	0.16 mH	0.24 mH
Force Factor (BI)	1.8 Tm	2.2 Tm
Linear Excursion (Xmax)	N/A	N/A
Sensitivity (SPL)	86.0 dB W/m	86.0 dB W/m
Operating Power (PE)	50 W	50 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



**Rockford Fosgate**

PART NAME: 3.5" Punch Midrange

PART NO: SP-34

TOLERANCE: N/A

SP-38

SCALE: N.T.S.

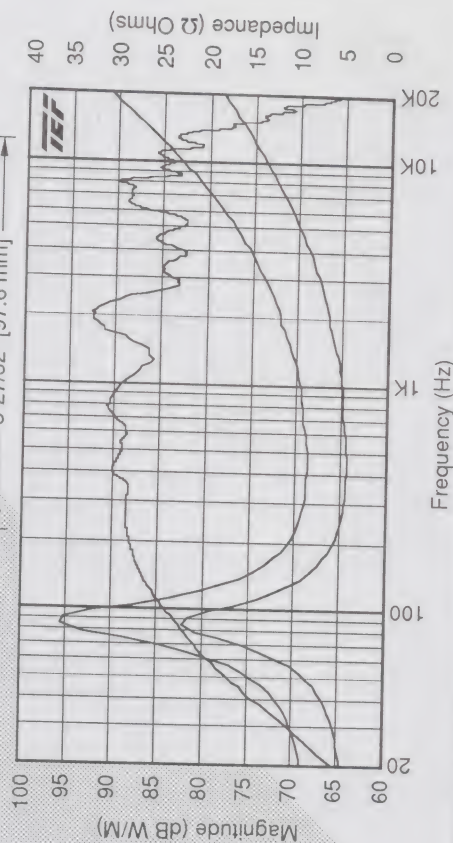
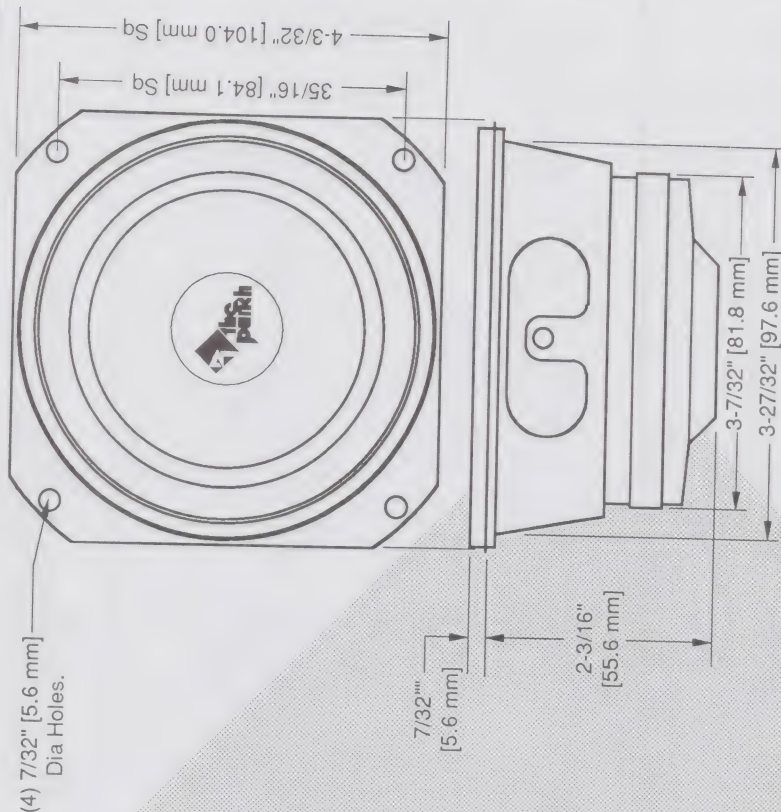
RELEASE: #1 (10-31-90)

APPR BY: *Chum*



TECHNICAL DATA	SP-44	SP-48
Nominal Diameter	4.00 in [101.6 mm]	4.00 in [101.6 mm]
Magnet Weight	5.97 oz [169.5 g]	5.97 oz [169.5 g]
Frequency Range	85 - 12,000 Hz	89 - 12,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	4.0Ω	7.9Ω
Resonance Frequency (fs)	85 Hz	89 Hz
Mechanical Q Factor (Qms)	2.41	2.44
Electrical Q Factor (Qes)	0.47	0.61
Total Q Factor (Qts)	0.39	0.49
Effective Cone Area (Sd)	9.15 in <sup>2</sup> [0.0059 m <sup>2</sup> ]	9.15 in <sup>2</sup> [0.0059 m <sup>2</sup> ]
Equivalent Air Volume (Vas)	0.141 ft <sup>3</sup> [4.0 L]	0.141 ft <sup>3</sup> [4.0 L]
Compliance (Cms)	0.00075 m/N	0.00075 m/N
Moving Mass (Mms)	0.17 oz [4.7 g]	0.15 oz [4.3 g]
Voice Coil Diameter	1.00 in [25.4 mm]	1.00 in [25.4 mm]
Voice Coil Winding Height	0.32 in [8.1 mm]	0.32 in [8.1 mm]
Voice Coil Former Material	3.5 Mil Aluminum	3.5 Mil Aluminum
Voice Coil Inductance	0.25 mH	0.38 mH
Force Factor (Bl)	4.6 Tm	5.6 Tm
Linear Excursion (Xmax)	0.04 in [0.9 mm]	0.04 in [0.9 mm]
Sensitivity (SPL)	88.0 dB W/m	88.0 dB W/m
Operating Power (PE)	50 W	50 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



**Rockford Fosgate**

PART No.: **SP-44** PART NAME: **4" Punch Midrange**

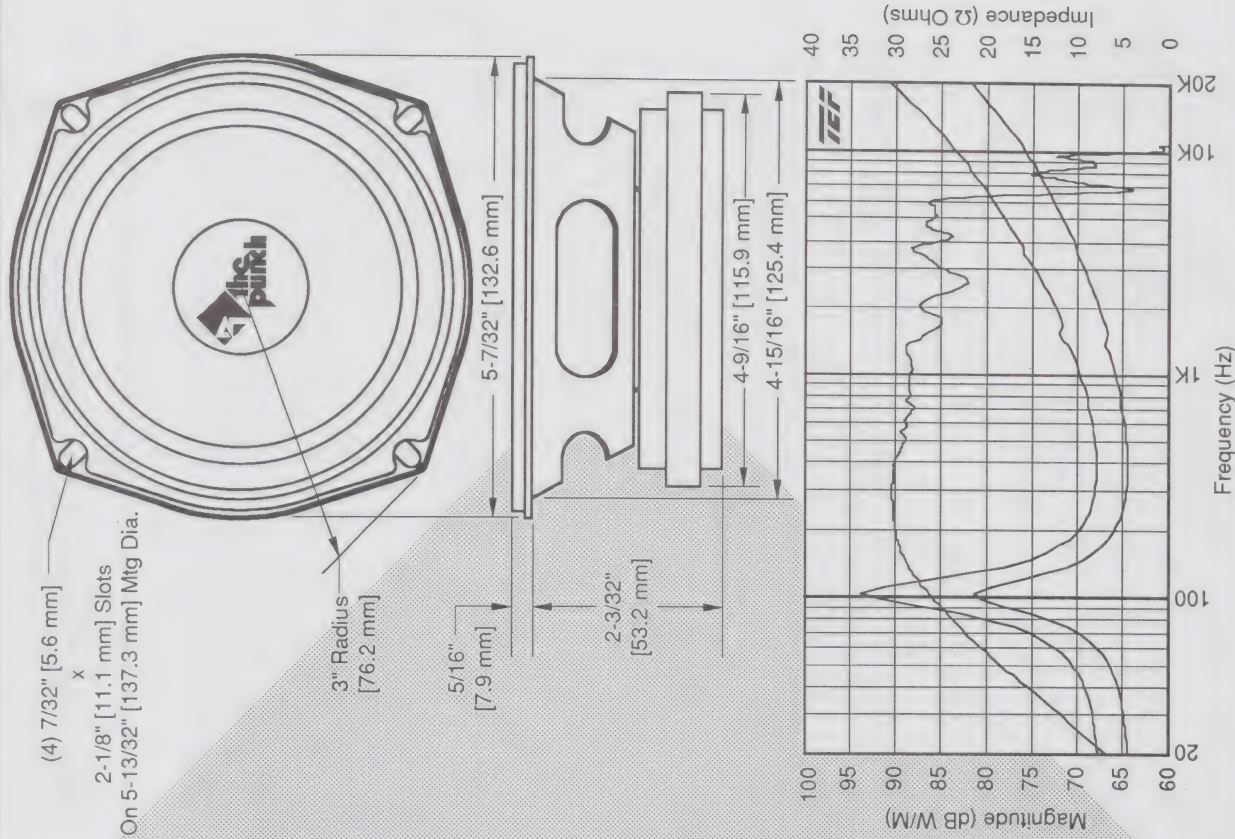
RELEASE: **#1 (10-31-90)** TOLERANCE: **N/A** SCALE: **N.T.S.**

DRWN BY: *BLU* APPR BY: *Chum*



TECHNICAL DATA	SP-54	SP-58
Nominal Diameter	5.25 in [133.4 mm]	5.25 in [133.4 mm]
Magnet Weight	16.00 oz [454.4 g]	16.00 oz [454.4 g]
Frequency Range	96 - 6,200 Hz	96 - 6,200 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	4.1Ω	8.1Ω
Resonance Frequency (fs)	96 Hz	96 Hz
Mechanical Q Factor (QMS)	2.74	2.71
Electrical Q Factor (QES)	0.62	0.82
Total Q Factor (QTs)	0.50	0.63
Effective Cone Area (SD)	15.35 in <sup>2</sup> [0.0099 m <sup>2</sup> ]	15.35 in <sup>2</sup> [0.0099 m <sup>2</sup> ]
Equivalent Air Volume (VAS)	0.141 ft <sup>3</sup> [4.0 L]	0.141 ft <sup>3</sup> [4.0 L]
Compliance (CMS)	0.00031 m/N	0.00031 m/N
Moving Mass (MMS)	0.32 oz [9.0 g]	0.32 oz [9.0 g]
Voice Coil Diameter	1.50 in [38.1 mm]	1.50 in [38.1 mm]
Voice Coil Winding Height	0.41 in [10.4 mm]	0.41 in [10.4 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	0.40 mH	0.59 mH
Force Factor (Bl)	6.0 Tm	7.3 Tm
Linear Excursion (Xmax)	0.10 in [2.5 mm]	0.10 in [2.5 mm]
Sensitivity (SPL)	90.0 dB W/m	90 dB W/m
Operating Power (PE)	80 W	80 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



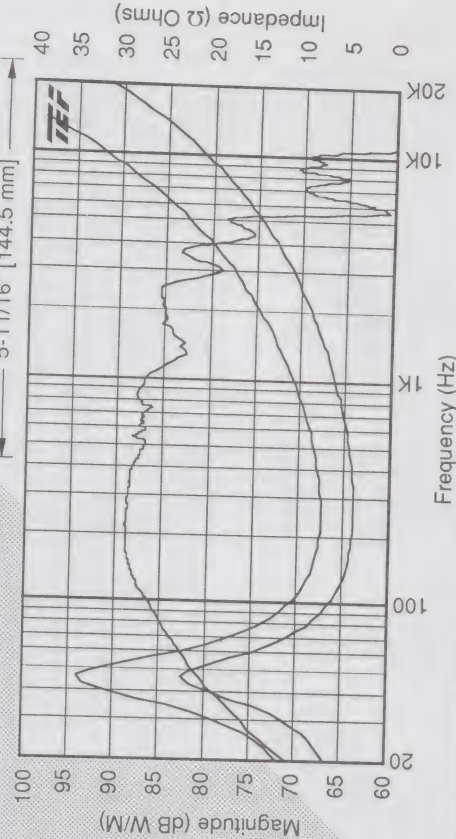
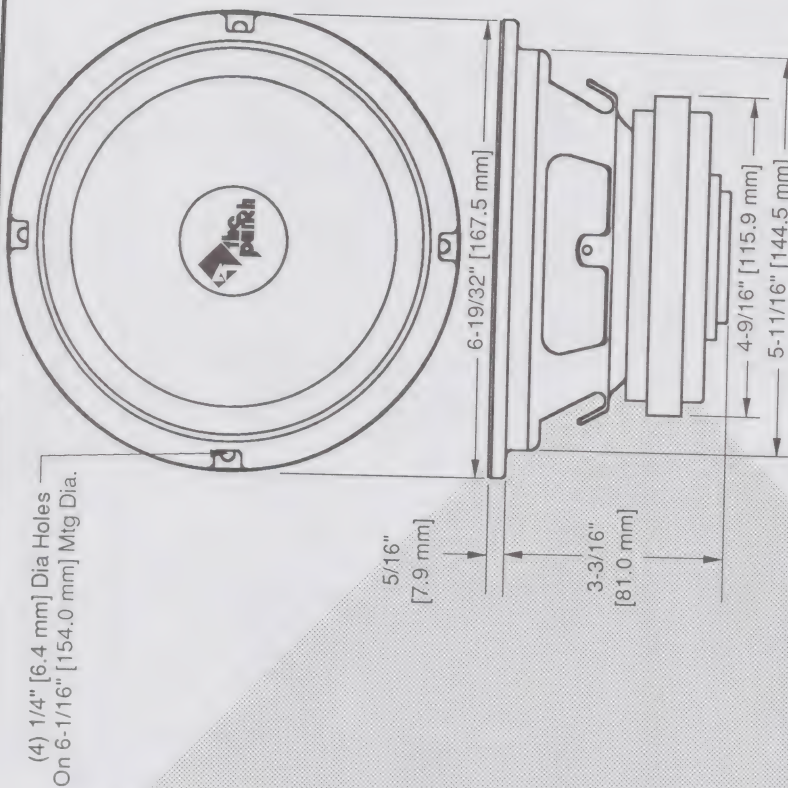
Rockford Fosgate

PART NO.: SP-54	PART NAME: 5.25" Punch Midbass
SP-58	TOLERANCE: N/A
RELEASE: #2 (10-29-90)	SCALE: N.T.S.
	DRWN BY: <i>[Signature]</i>
	APPR BY: <i>[Signature]</i>



TECHNICAL DATA		SP-64	SP-68
Nominal Diameter		6.50 in [165.1 mm]	6.50 in [165.1 mm]
Magnet Weight		18.00 oz [511.2 g]	18.00 oz [511.2 g]
Frequency Range		44 - 4,000 Hz	50 - 4,000 Hz
Nominal Impedance		4Ω	8Ω
DC Resistance (RE)		3.6Ω	7.1Ω
Resonance Frequency (fs)		44 Hz	50 Hz
Mechanical Q Factor (QMS)		2.16	2.09
Electrical Q Factor (QES)		0.36	0.47
Total Q Factor (QTS)		0.31	0.38
Effective Cone Area (Sa)		21.08 in <sup>2</sup> [0.0136 m <sup>2</sup> ]	21.08 in <sup>2</sup> [0.0136 m <sup>2</sup> ]
Equivalent Air Volume (VAs)		0.848 ft <sup>3</sup> [20.0 L]	0.848 ft <sup>3</sup> [20.0 L]
Compliance (CMS)		0.00077 m/N	0.00077 m/N
Moving Mass (MMS)		0.60 oz [17.0 g]	0.46 oz [13.2 g]
Voice Coil Diameter		1.50 in [38.1 mm]	1.50 in [38.1 mm]
Voice Coil Winding Height		0.70 in [17.8 mm]	0.70 in [17.8 mm]
Voice Coil Former Material		5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance		0.59 mH	0.87 mH
Force Factor (Bl)		6.8 Tm	7.9 Tm
Linear Excursion (Xmax)		0.20 in [5.1 mm]	0.20 in [5.1 mm]
Sensitivity (SPL)		89 dB W/m	89 dB W/m
Operating Power (PE)		80 W	80 W

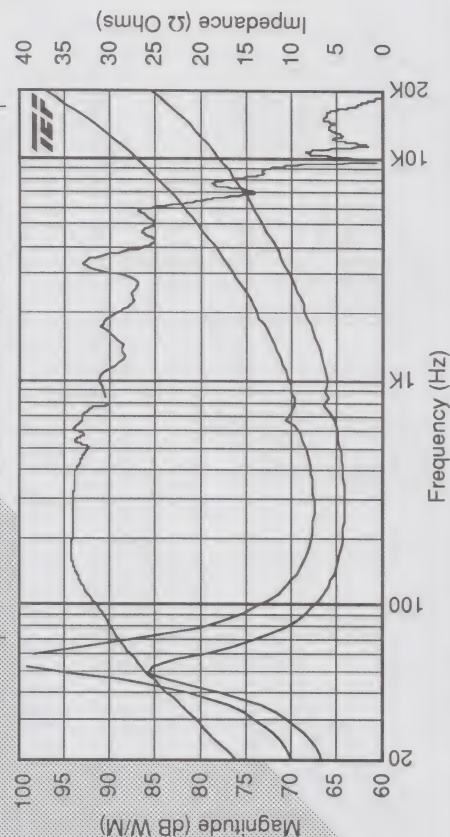
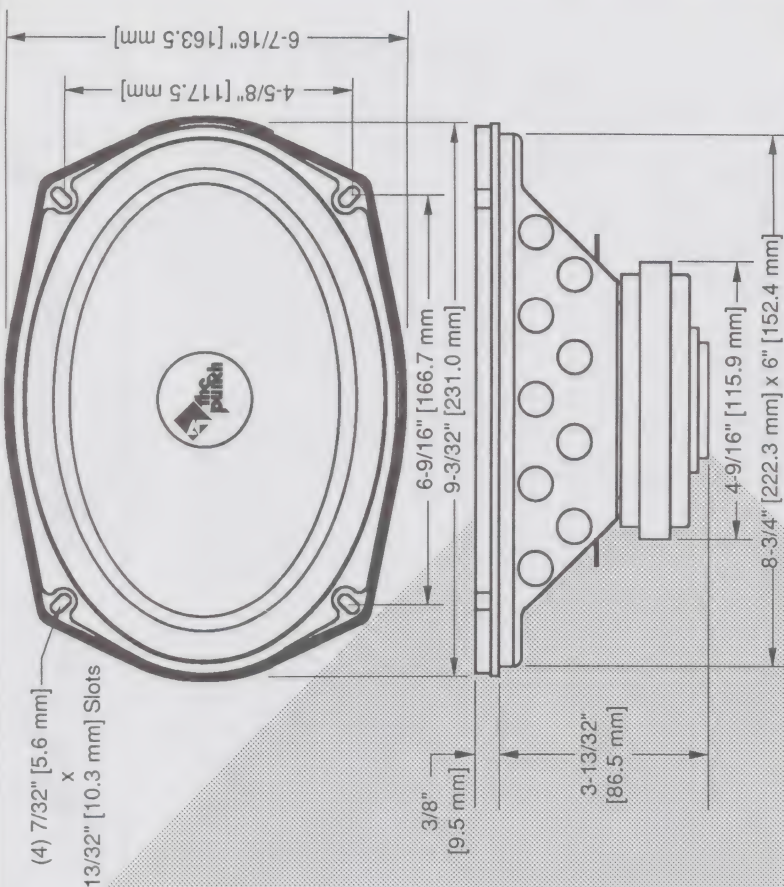
Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



**Rockford Fosgate**

PART No.: SP-64	PART NAME: 6.5" Punch Midbass
SP-68	TOLERANCE: N/A
RELEASE: #2 (10-29-90)	SCALE: N.T.S.
	DRWN BY: <i>BLW</i>
	APPR BY: <i>Amel</i>





TECHNICAL DATA	SP-694	SP-698
Nominal Diameter	6x9 in [152.4x228.6 mm]	6x9 in [152.4x228.6 mm]
Magnet Weight	18.00 oz [511.2 g]	18.00 oz [511.2 g]
Frequency Range	50 - 6,000 Hz	56 - 6,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.6Ω	7.2Ω
Resonance Frequency (fs)	50 Hz	56 Hz
Mechanical Q Factor (QMS)	2.48	2.69
Electrical Q Factor (QES)	0.34	0.54
Total Q Factor (QTS)	0.30	0.45
Effective Cone Area (SD)	33.64 in <sup>2</sup> [0.0217 m <sup>2</sup> ]	33.64 in <sup>2</sup> [0.0217 m <sup>2</sup> ]
Equivalent Air Volume (VAS)	1.696 ft <sup>3</sup> [48.0 L]	1.696 ft <sup>3</sup> [48.0 L]
Compliance (CMS)	0.00072 m/N	0.00072 m/N
Moving Mass (MMS)	0.50 oz [14.2 g]	0.40 oz [11.2 g]
Voice Coil Diameter	1.50 in [38.1 mm]	1.50 in [38.1 mm]
Voice Coil Winding Height	0.52 in [13.2 mm]	0.52 in [13.2 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	0.44 mH	0.63 mH
Force Factor (Bl)	6.9 Tm	7.3 Tm
Linear Excursion (Xmax)	0.10 in [2.6 mm]	0.10 in [2.6 mm]
Sensitivity (SPL)	94.0 dB W/m	94.0 dB W/m
Operating Power (PE)	80 W	80 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit

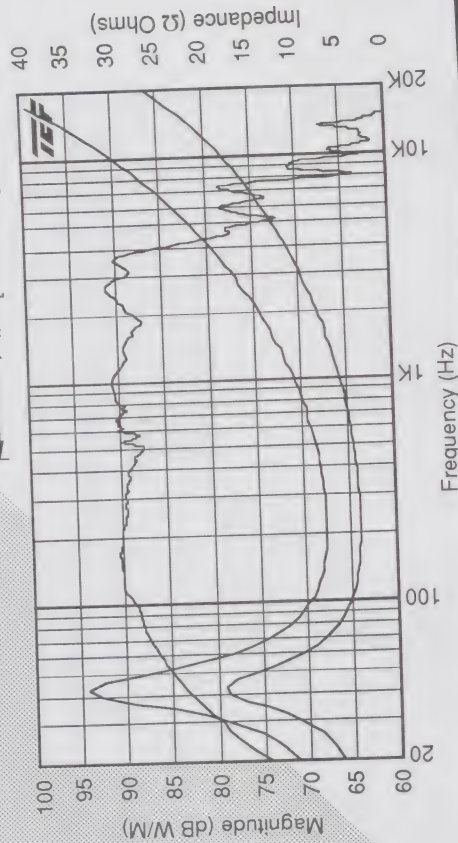
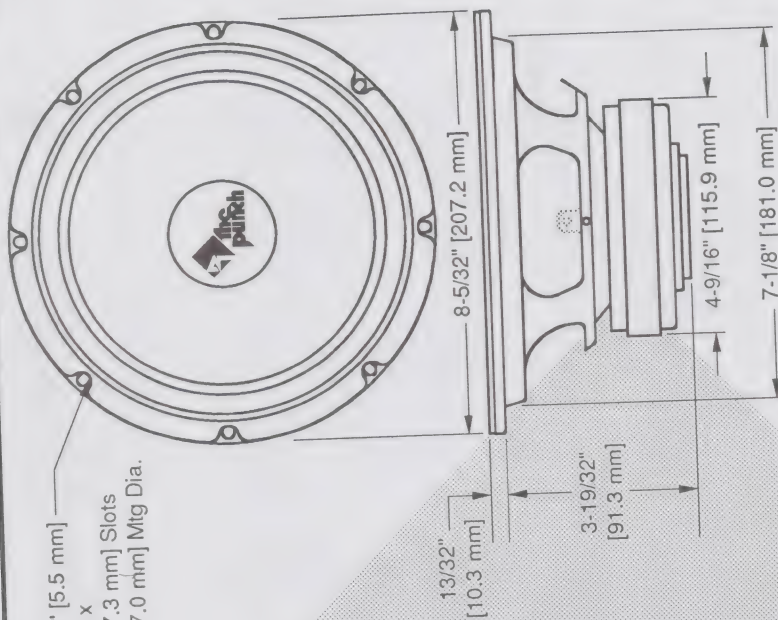
PART No.: SP-694	PART NAME: 6x9" Punch Woofer
SP-698	TOLERANCE: N/A SCALE: N.T.S.
RELEASE: #2 (10-29-90)	DRWN BY: <i>[Signature]</i> APPR BY: <i>[Signature]</i>





TECHNICAL DATA	SP-84	SP-88
Nominal Diameter	8.00 in [203.2 mm]	8.00 in [203.2 mm]
Magnet Weight	22.00 oz [624.8 g]	22.00 oz [624.8 g]
Frequency Range	40 - 4,200 Hz	40 - 4,200 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.6Ω	7.3Ω
Resonance Frequency (fs)	40 Hz	40 Hz
Mechanical Q Factor (QMS)	2.32	2.28
Electrical Q Factor (QES)	0.48	0.55
Total Q Factor (QTS)	0.40	0.45
Effective Cone Area (Sd)	34.10 in <sup>2</sup> [0.0220 m <sup>2</sup> ]	34.10 in <sup>2</sup> [0.0220 m <sup>2</sup> ]
Equivalent Air Volume (Vas)	1.978 ft <sup>3</sup> [56.0 L]	1.978 ft <sup>3</sup> [56.0 L]
Compliance (CMS)	0.00081 m/N	0.00081 m/N
Moving Mass (Mms)	0.69 oz [19.5 g]	0.67 oz [19.1 g]
Voice Coil Diameter	2.00 in [50.8 mm]	2.00 in [50.8 mm]
Voice Coil Winding Height	0.55 in [14.0 mm]	0.55 in [14.0 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	0.51 mH	0.85 mH
Force Factor (Bl)	6.1 Tm	7.9 Tm
Linear Excursion (Xmax)	0.17 in [4.3 mm]	0.17 in [4.3 mm]
Sensitivity (SPL)	90 dB W/m	90 dB W/m
Operating Power (Pe)	100 W	100 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



# Rockford Fosgate

PART NAME: 8" Punch Woofer

PART No.: SP-84

TOLERANCE: N/A

PART No.: SP-88

DRWN BY: *BLW*

RELEASE: #2 (10-29-90)

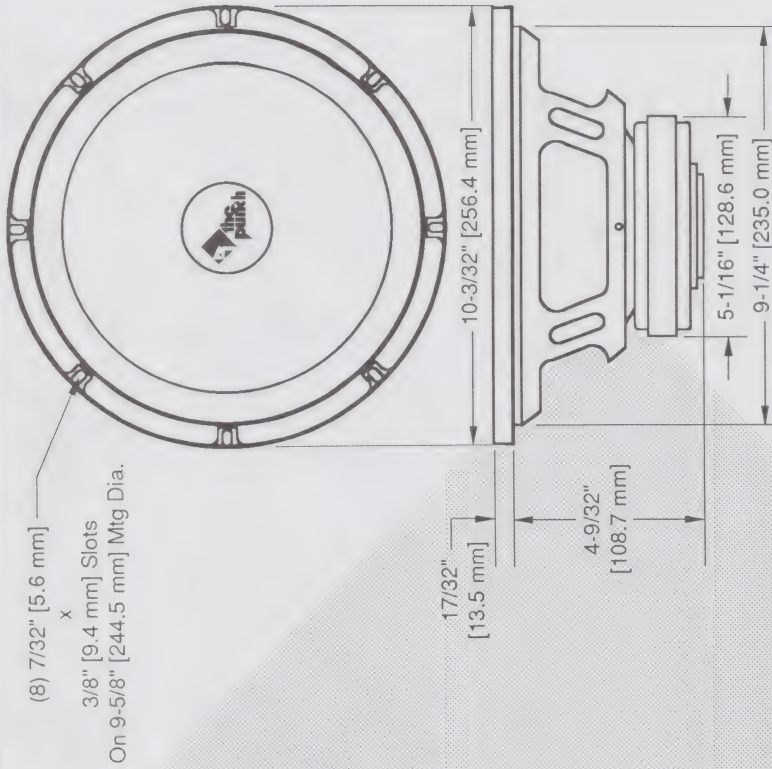
APPR BY: *Chen*

SCALE: N.T.S.



TECHNICAL DATA	SP-104	SP-108
Nominal Diameter	10.00 in [254.0 mm]	10.00 in [254.0 mm]
Magnet Weight	30.00 oz [852.0 g]	30.00 oz [852.0 g]
Frequency Range	38 - 4,000 Hz	40 - 4,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.5Ω	7.1Ω
Resonance Frequency (fs)	38 Hz	40 Hz
Mechanical Q Factor (QMS)	2.97	2.81
Electrical Q Factor (QES)	0.49	0.73
Total Q Factor (QTS)	0.42	0.58
Effective Cone Area (SD)	55.49 in <sup>2</sup> [0.0358 m <sup>2</sup> ]	55.49 in <sup>2</sup> [0.0358 m <sup>2</sup> ]
Equivalent Air Volume (VAS)	3.178 ft <sup>3</sup> [90.0 L]	3.178 ft <sup>3</sup> [90.0 L]
Compliance (CMS)	0.00049 m/N	0.00049 m/N
Moving Mass (MMS)	1.25 oz [35.5 g]	1.13 oz [31.9 g]
Voice Coil Diameter	2.00 in [50.8 mm]	2.00 in [50.8 mm]
Voice Coil Winding Height	0.53 in [13.5 mm]	0.53 in [13.5 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	0.47 mH	0.74 mH
Force Factor (Bl)	7.8 Tm	8.8 Tm
Linear Excursion (Xmax)	0.16 in [4.0 mm]	0.16 in [4.0 mm]
Sensitivity (SPL)	92 dB W/m	92 dB W/m
Operating Power (PE)	100 W	100 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



PART No.: SP-104

PART NAME: 10" Punch Woofer

TOLERANCE: N/A

SCALE: N.T.S.

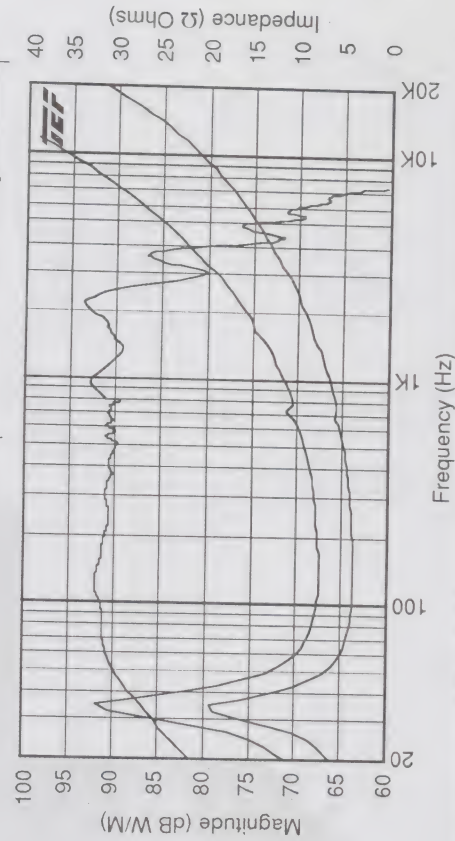
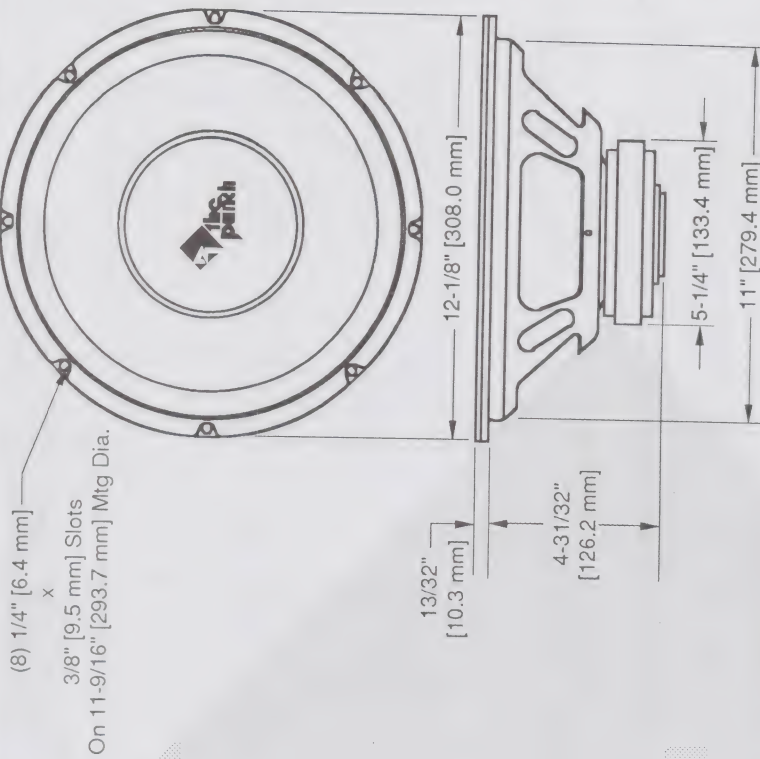
DRWN BY: *EBW*

APPR BY: *Glenn*

RELEASE: #2 (10-29-90)



TECHNICAL DATA	SP-412	SP-812
Nominal Diameter	12.00 in [304.8 mm]	12.00 in [304.8 mm]
Magnet Weight	38.00 oz [1079.2 g]	38.00 oz [1079.2 g]
Frequency Range	32 - 4,000 Hz	34 - 4,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.3Ω	6.7Ω
Resonance Frequency (fs)	32 Hz	34 Hz
Mechanical Q Factor (Qms)	3.38	2.90
Electrical Q Factor (Qes)	0.70	0.84
Total Q Factor (Qts)	0.58	0.65
Effective Cone Area (Sd)	84.48 in <sup>2</sup> [0.0545 m <sup>2</sup> ]	84.48 in <sup>2</sup> [0.0545 m <sup>2</sup> ]
Equivalent Air Volume (Vas)	5.156 ft <sup>3</sup> [146.0 L]	5.156 ft <sup>3</sup> [146.0 L]
Compliance (Cms)	0.00035 m/N	0.00035 m/N
Moving Mass (Mms)	2.52 oz [71.4 g]	2.27 oz [64.4 g]
Voice Coil Diameter	2.00 in [50.8 mm]	2.00 in [50.8 mm]
Voice Coil Winding Height	0.69 in [17.5 mm]	0.69 in [17.5 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	0.65 mH	1.02 mH
Force Factor (Bl)	8.3 Tm	10.4 Tm
Linear Excursion (Xmax)	0.24 in [6.1 mm]	0.24 in [6.1 mm]
Sensitivity (SPL)	90 dB W/m	90 dB W/m
Operating Power (PE)	100 W	100 W
Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit		

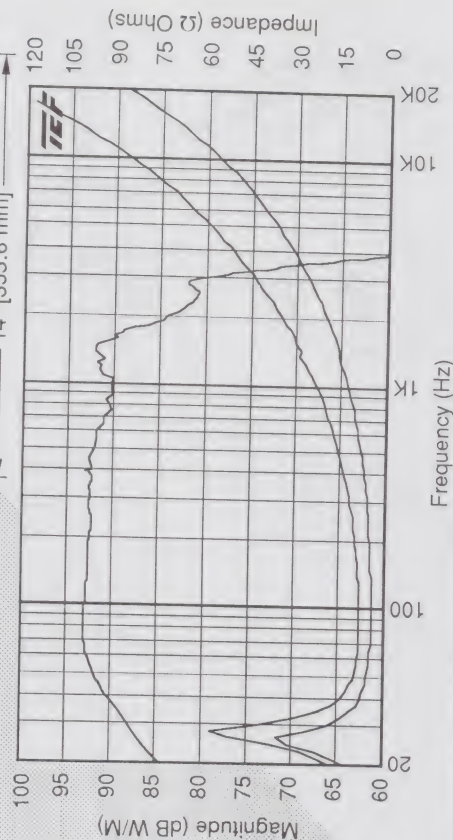
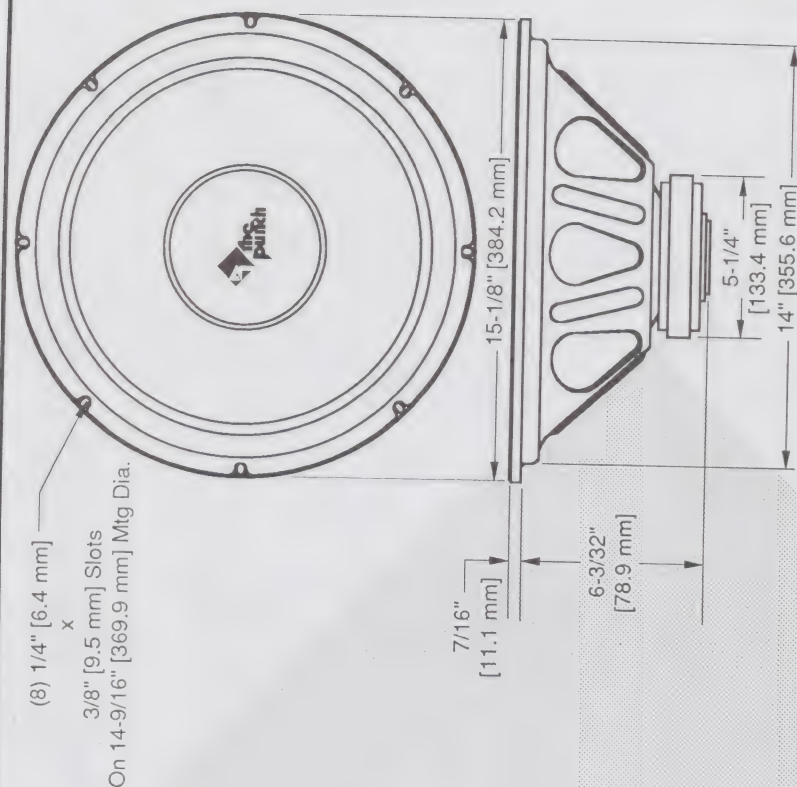


PART No.: SP-412	PART NAME: 12" Punch Woofer
SP-812	TOLERANCE: N/A
RELEASE: #2 (10-29-90)	SCALE: N.T.S.
	DRWN BY: <i>ASW</i>
	APPR BY: <i>Chmel</i>



TECHNICAL DATA	SP-415	SP-815
Nominal Diameter	15.00 in [381.0 mm]	15.00 in [381.0 mm]
Magnet Weight	38.00 oz [1079.2 g]	38.00 oz [1079.2 g]
Frequency Range	25 - 2,000 Hz	25 - 2,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.6Ω	7.3Ω
Resonance Frequency (fs)	25 Hz	25 Hz
Mechanical Q Factor (Qms)	3.63	4.77
Electrical Q Factor (Qes)	0.54	0.67
Total Q Factor (Qts)	0.48	0.59
Effective Cone Area (Sd)	134.54 in <sup>2</sup> [0.0868 m <sup>2</sup> ]	134.54 in <sup>2</sup> [0.0868 m <sup>2</sup> ]
Equivalent Air Volume (Vas)	12.254 ft <sup>3</sup> [347.0 L]	12.254 ft <sup>3</sup> [347.0 L]
Compliance (Cms)	0.00032 m/N	0.00032 m/N
Moving Mass (Mms)	4.40 oz [124.8 g]	4.37 oz [123.9 g]
Voice Coil Diameter	2.00 in [50.8 mm]	2.00 in [50.8 mm]
Voice Coil Winding Height	0.73 in [18.5 mm]	0.73 in [18.5 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	1.66 mH	2.96 mH
Force Factor (Bl)	11.5 Tm	14.6 Tm
Linear Excursion (Xmax)	0.26 in [6.6 mm]	0.26 in [6.6 mm]
Sensitivity (SPL)	92.0 dB W/m	92.0 dB W/m
Operating Power (Pe)	100 W	100 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



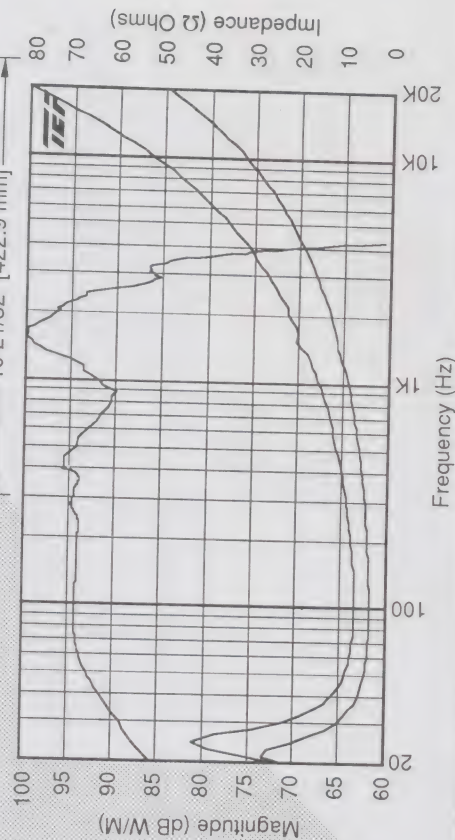
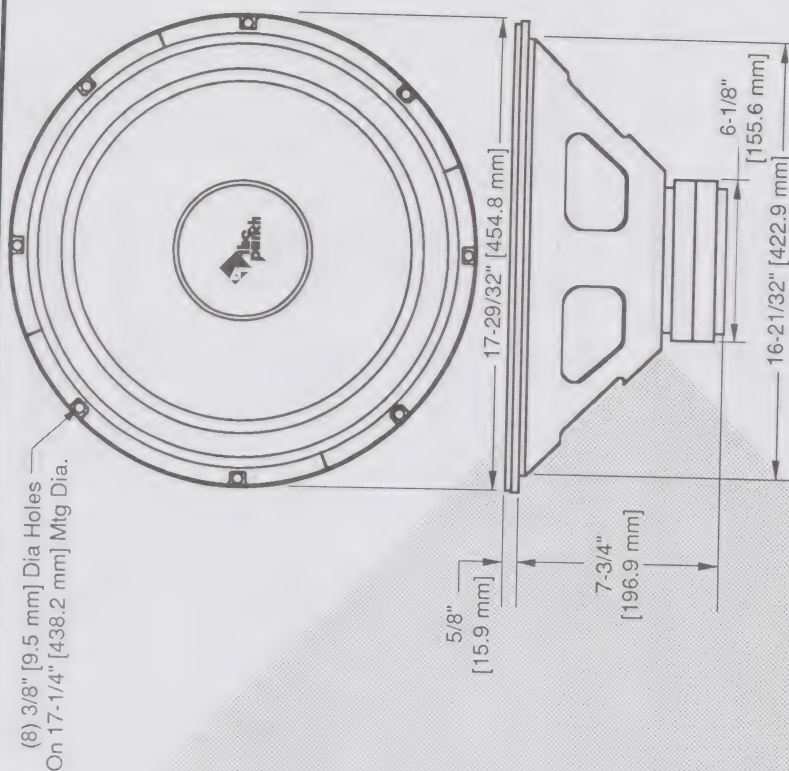
**Rockford Fosgate**

PART NO.: SP-415	PART NAME: 15" Punch Woofer
SP-815	TOLERANCE: N/A
RELEASE: #2 (11-1-90)	SCALE: N.T.S.
	APPR BY: <i>Chud</i>



TECHNICAL DATA		SP-418	SP-818
Nominal Diameter	18.00 in [457.2 mm]	18.00 in [457.2 mm]	
Magnet Weight	105.00 oz [2926.8 g]	105.00 oz [2926.8 g]	
Frequency Range	22 - 3,000 Hz	22 - 3,000 Hz	
Nominal Impedance	4Ω	4Ω	8Ω
DC Resistance (RE)	3.1Ω	3.1Ω	6.2Ω
Resonance Frequency (fs)	22 Hz	22 Hz	24 Hz
Mechanical Q Factor (Qms)	3.16	3.16	3.51
Electrical Q Factor (Qes)	0.41	0.41	0.59
Total Q Factor (Qts)	0.36	0.36	0.51
Effective Cone Area (Sd)	174.38 in <sup>2</sup> [0.1125 m <sup>2</sup> ]	174.38 in <sup>2</sup> [0.1125 m <sup>2</sup> ]	174.38 in <sup>2</sup> [0.1125 m <sup>2</sup> ]
Equivalent Air Volume (Vas)	21.825 ft <sup>3</sup> [618.0 L]	21.825 ft <sup>3</sup> [618.0 L]	21.825 ft <sup>3</sup> [618.0 L]
Compliance (Cms)	0.00034 m/N	0.00034 m/N	0.00034 m/N
Moving Mass (Mms)	5.37 oz [152.1 g]	4.52 oz [128.0 g]	
Voice Coil Diameter	2.50 in [63.5 mm]	2.50 in [63.5 mm]	
Voice Coil Winding Height	1.02 in [25.8 mm]	1.02 in [25.8 mm]	
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	1.02 mH	1.02 mH	1.66 mH
Force Factor (Bl)	12.7 Tm	12.7 Tm	14.2 Tm
Linear Excursion (Xmax)	0.32 in [8.1 mm]	0.32 in [8.1 mm]	0.32 in [8.1 mm]
Sensitivity (SPL)	94.0 dB W/m	94.0 dB W/m	94.0 dB W/m
Operating Power (PE)	150 W	150 W	150 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



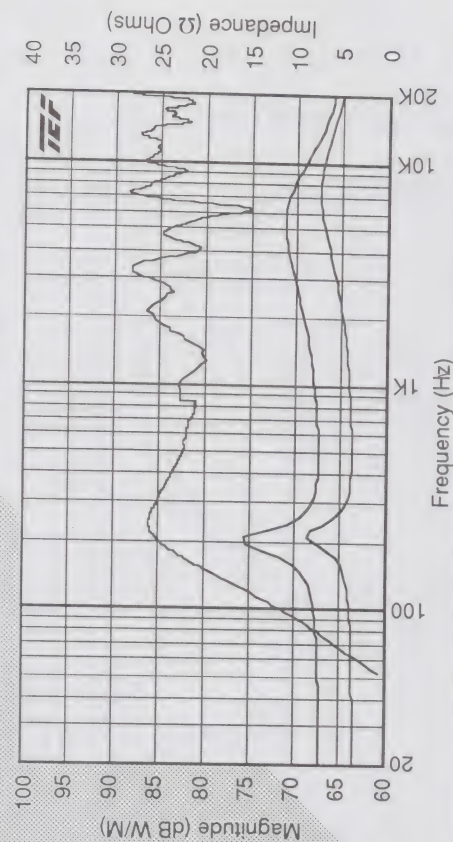
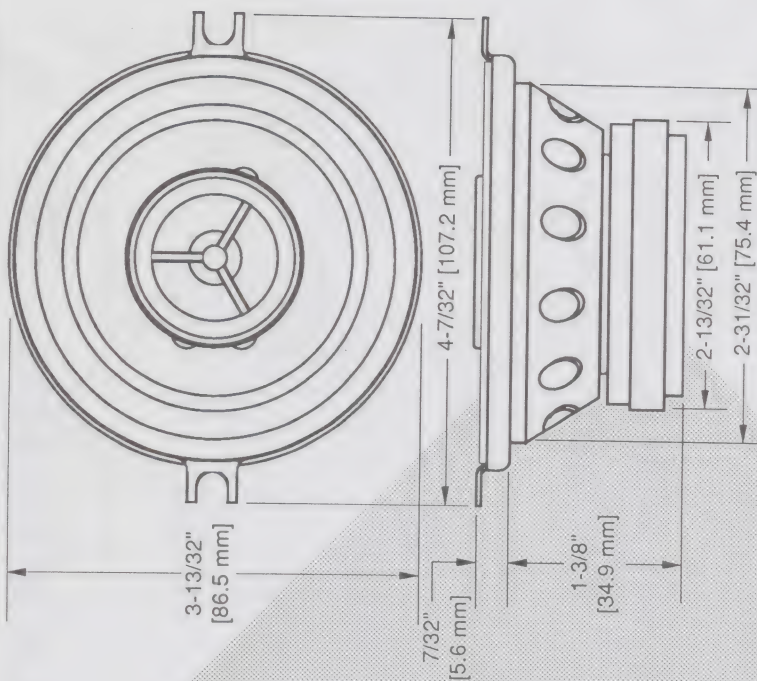
**Packford Pospake**

PART No.: SP-418	PART NAME: 18" Punch Woofer
SP-818	TOLERANCE: N/A
RELEASE: #1 (12-4-90)	SCALE: N.T.S.
	DRWN BY: <i>BB</i>
	APPR BY: <i>Chund</i>



TECHNICAL DATA	SP-34TW	SP-38TW
Nominal Diameter	3.50 in [88.9 mm]	3.50 in [88.9 mm]
Magnet Weight	2.80 oz [79.4 g]	2.80 oz [79.4 g]
Frequency Range	213 - 20,000 Hz	213 - 20,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.6Ω	7.1Ω
Resonance Frequency (fs)	213 Hz	213 Hz
Mechanical Q Factor (QMS)	3.54	3.36
Electrical Q Factor (QES)	2.61	2.77
Total Q Factor (QTS)	1.50	1.52
Effective Cone Area (SD)	6.05 in <sup>2</sup> [0.0039 m <sup>2</sup> ]	6.05 in <sup>2</sup> [0.0039 m <sup>2</sup> ]
Equivalent Air Volume (VAS)	0.035 ft <sup>3</sup> [1.0 L]	0.035 ft <sup>3</sup> [1.0 L]
Compliance (CMS)	0.00028 m/N	0.00028 m/N
Moving Mass (MMS)	0.07 oz [2.0 g]	0.07 oz [2.0 g]
Voice Coil Diameter	1.00 in [25.4 mm]	1.00 in [25.4 mm]
Voice Coil Winding Height	0.19 in [4.8 mm]	0.19 in [4.8 mm]
Voice Coil Former Material	3.5 Mil Aluminum	3.5 Mil Aluminum
Voice Coil Inductance	0.13 mH	0.17 mH
Force Factor (Bl)	1.9 Tm	2.6 Tm
Linear Excursion (Xmax)	0.004 in [0.1 mm]	0.004 in [0.1 mm]
Sensitivity (SPL)	85.0 dB W/m	85.0 dB W/m
Operating Power (PE)	50 W	50 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



**Packford Jospike**

PART No.: **SP-34TW** PART NAME: **3.5" Twin Two-Way Speaker**

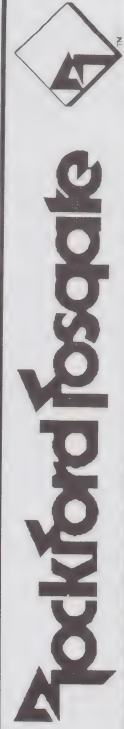
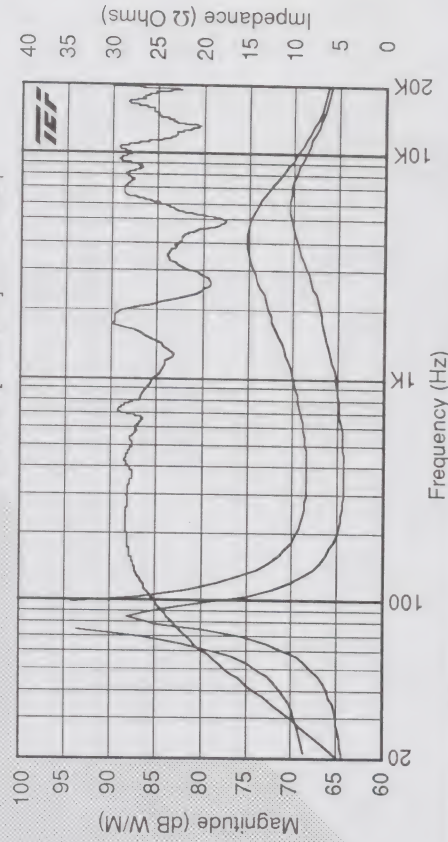
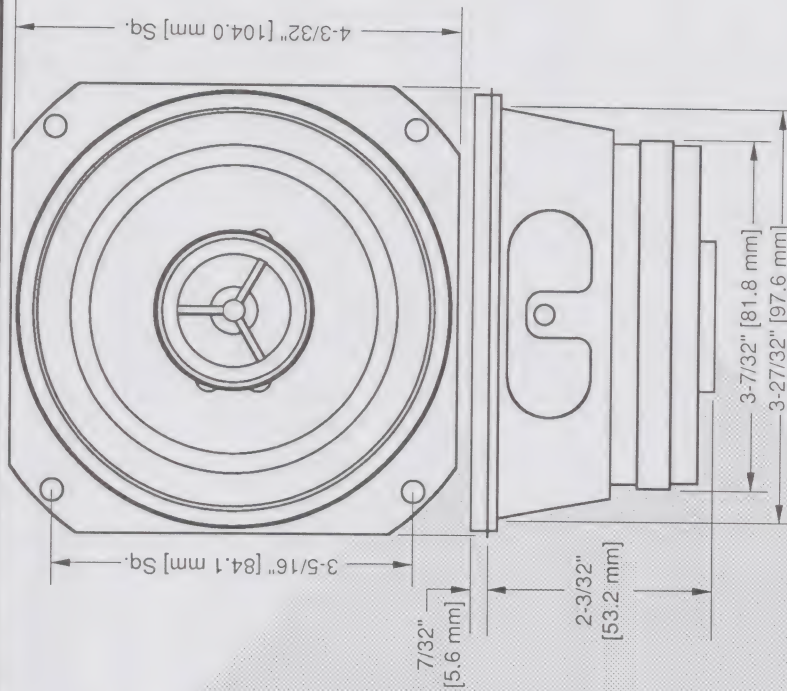
RELEASE: **#1 (12-10-90)** TOLERANCE: **N/A** SCALE: **N.T.S.**

APPR BY: *Chumel*



TECHNICAL DATA	SP-44TW	SP-48TW
Nominal Diameter	4.00" [101.6 mm]	4.00" [101.6 mm]
Magnet Weight	5.97 oz [169.3 g]	5.97 oz [169.3 g]
Frequency Range	84 - 20,000 Hz	84 - 20,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.9Ω	7.9Ω
Resonance Frequency (fs)	84 Hz	84 Hz
Mechanical Q Factor (QMS)	3.83	3.88
Electrical Q Factor (QES)	0.57	0.68
Total Q Factor (QTS)	0.50	0.58
Effective Cone Area (SD)	9.15 in <sup>2</sup> [0.0059 m <sup>2</sup> ]	9.15 in <sup>2</sup> [0.0059 m <sup>2</sup> ]
Equivalent Air Volume (VAS)	0.106 ft <sup>3</sup> [3.0 L]	0.106 ft <sup>3</sup> [3.0 L]
Compliance (CMS)	0.00069 m/N	0.00069 m/N
Moving Mass (MMS)	0.18 oz [5.2 g]	0.18 oz [5.2 g]
Voice Coil Diameter	1.00 in [25.4 mm]	25 mm
Voice Coil Winding Height	0.31 in [7.8 mm]	0.30 in [7.7 mm]
Voice Coil Former Material	3.5 Mil Aluminum	3.5 Mil Aluminum
Voice Coil Inductance	0.26 mH	0.31 mH
Force Factor (Bl)	4.3 Tm	5.6 Tm
Linear Excursion (Xmax)	0.03 in [0.8 mm]	0.03 in [0.8 mm]
Sensitivity (SPL)	87.0 dB W/m	87.0 dB W/m
Operating Power (PE)	50 W	50 W

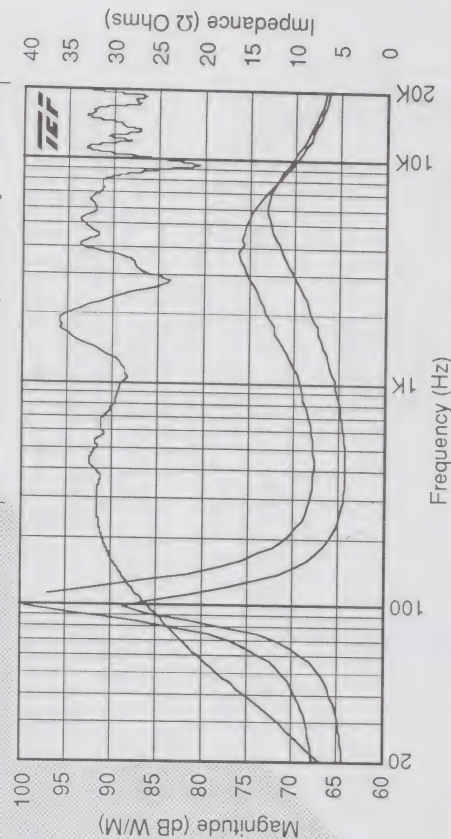
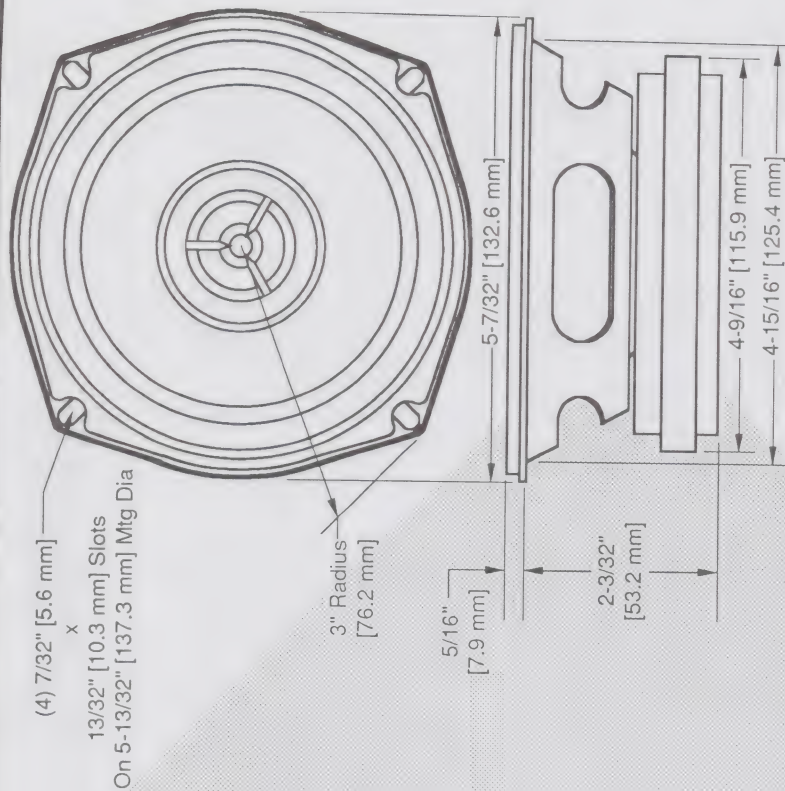
Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



PART No.:	SP-44TW	PART NAME:	4" Twin Two Way Speaker
RELEASE:	#1 (12-3-90)	TOLERANCE:	N/A
		SCALE:	N.T.S.
		DRWN BY:	FSW
		APPR BY:	Chad



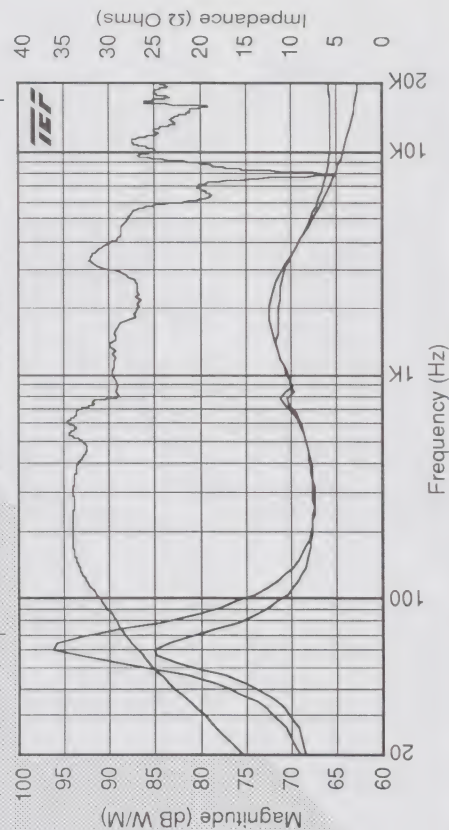
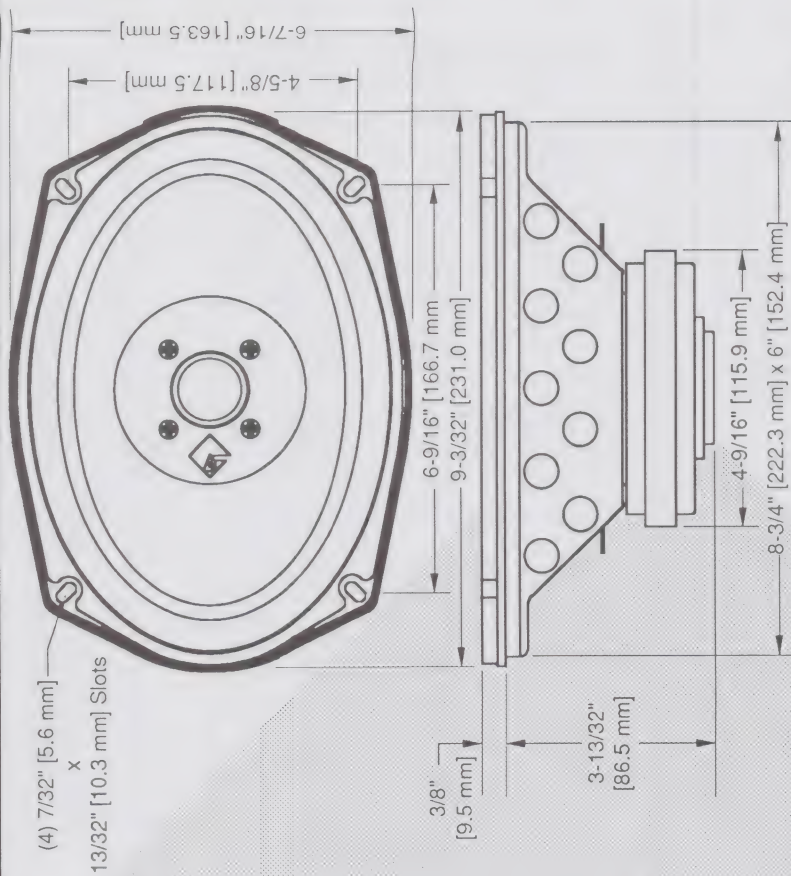
TECHNICAL DATA	SP-54TW	SP-58TW
Nominal Diameter	5.25 in [133.4 mm]	5.25 in [133.4 mm]
Magnet Weight	16.00 oz [454.4 g]	16.00 oz [454.4 g]
Frequency Range	95 - 20,000 Hz	102 - 20,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	4.1Ω	8.1Ω
Resonance Frequency (fs)	95 Hz	102 Hz
Mechanical Q Factor (QMS)	3.34	2.96
Electrical Q Factor (QES)	0.50	0.56
Total Q Factor (QTS)	0.43	0.47
Effective Cone Area (SD)	15.35 in <sup>2</sup> [0.0099 m <sup>2</sup> ]	15.35 in <sup>2</sup> [0.0099 m <sup>2</sup> ]
Equivalent Air Volume (VAS)	0.106 ft <sup>3</sup> [3.0 L]	0.106 ft <sup>3</sup> [3.0 L]
Compliance (CMS)	0.00024 m/N	0.00024 m/N
Moving Mass (MMS)	0.41 oz [11.6 g]	0.36 in [10.1 g]
Voice Coil Diameter	1.50 in [38.1 mm]	1.50 in [38.1 mm]
Voice Coil Winding Height	0.36 in [9.2 mm]	0.35 in [9.0 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	0.35 mH	0.38 mH
Force Factor (Bl)	7.5 Tm	9.7 Tm
Linear Excursion (Xmax)	0.05 in [1.3 mm]	0.05 in [1.3 mm]
Sensitivity (SPL)	90.0 dB W/m	90.0 dB W/m
Operating Power (PE)	80 W	80 W
Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit		



**Rockford Fosgate**

PART No.:	SP-54TW	PART NAME:	5.25" Twin Two Way Speaker
RELEASE:	#1 (12-3-90)	TOLERANCE:	N/A
		SCALE:	N.T.S.
		DRWN BY:	BBW
		APPR BY:	Chund





TECHNICAL DATA	SP-694TW	SP-698TW
Nominal Diameter	6x9 in [152.4x228.6 mm]	6x9 in [152.4x228.6 mm]
Magnet Weight	18.00 oz [510.3 g]	18.00 oz [510.3 g]
Frequency Range	59 - 20,000 Hz	60 - 20,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.5Ω	7.1Ω
Resonance Frequency (fs)	59 Hz	60 Hz
Mechanical Q Factor (Qms)	2.29	2.32
Electrical Q Factor (Qes)	0.40	0.49
Total Q Factor (Qts)	0.34	0.40
Effective Cone Area (Sd)	33.64 in <sup>2</sup> [0.0217 m <sup>2</sup> ]	33.64 in <sup>2</sup> [0.0217 m <sup>2</sup> ]
Equivalent Air Volume (Vas)	1.020 ft <sup>3</sup> [29.0 L]	1.020 ft <sup>3</sup> [29.0 L]
Compliance (Cms)	0.00044 m/N	0.00044 m/N
Moving Mass (Mms)	0.58 oz [16.5 g]	0.56 oz [16.0 g]
Voice Coil Diameter	1.50 in [38.1 mm]	1.50 in [38.1 mm]
Voice Coil Winding Height	0.50 in [12.7 mm]	0.50 in [12.7 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	0.31 mH	0.21 mH
Force Factor (Bl)	7.4 Tm	9.4 Tm
Linear Excursion (Xmax)	0.09 in [2.3 mm]	0.09 in [2.3 mm]
Sensitivity (SPL)	93.0 dB W/m	93.0 dB W/m
Operating Power (PE)	80 W	80 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



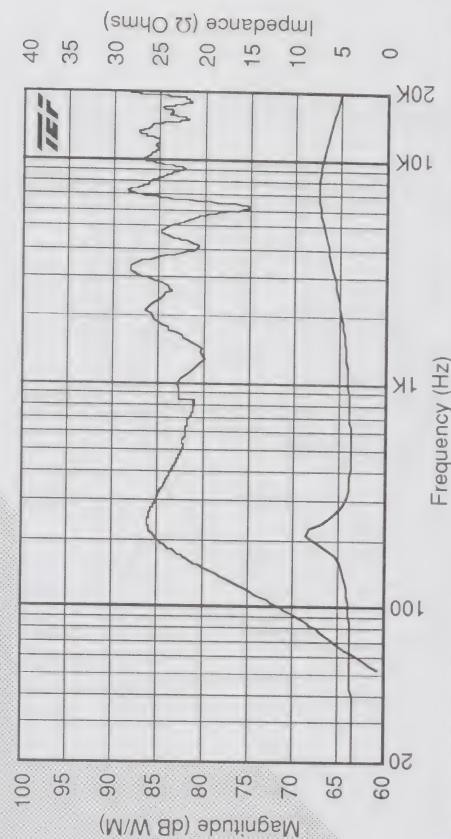
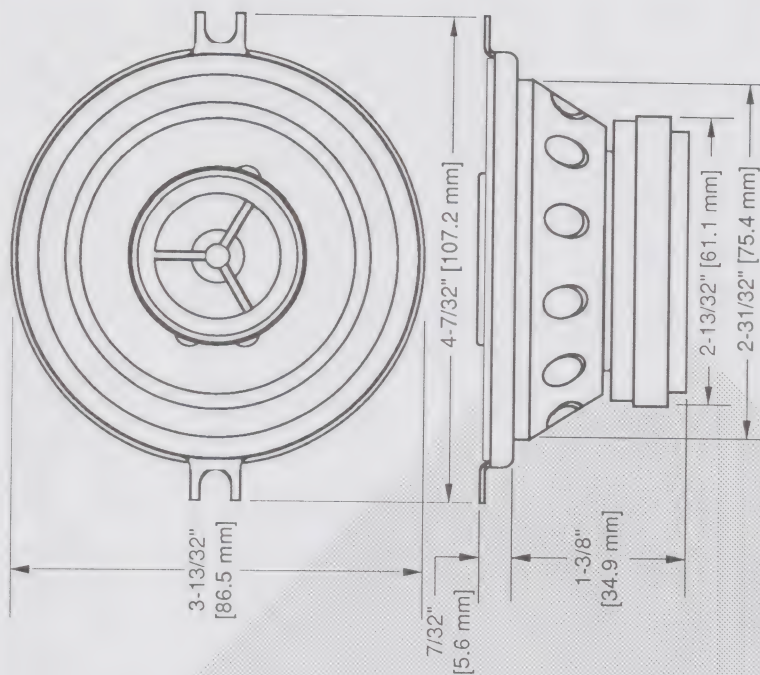
**Rockford Fosgate**

PART No.: SP-694TW	PART NAME: 6x9" Twin Two Way Speaker
SP-698TW	TOLERANCE: N/A
RELEASE: #1 (12-3-90)	SCALE: N.T.S.
	APPR BY: <i>Chumel</i>



TECHNICAL DATA	SPEC-34	SPEC-38
Nominal Diameter	3.50 in [88.9 mm]	Not Available
Magnet Weight	2.80 oz [79.4 g]	At This Time
Frequency Range	213 - 20,000 Hz	
Nominal Impedance	4Ω	
DC Resistance (RE)	3.6Ω	
Resonance Frequency (fs)	213 Hz	
Mechanical Q Factor (Qms)	3.54	
Electrical Q Factor (Qes)	2.61	
Total Q Factor (Qts)	1.50	
Effective Cone Area (Sd)	6.05 in <sup>2</sup> [0.0039 m <sup>2</sup> ]	
Equivalent Air Volume (Vas)	0.035 ft <sup>3</sup> [1.0 L]	
Compliance (Cms)	0.00028 m/N	
Moving Mass (Mms)	0.07 oz [2.0 g]	
Voice Coil Diameter	1.00 in [25.4 mm]	
Voice Coil Winding Height	0.19 in [4.8 mm]	
Voice Coil Former Material	3.5 Mil Aluminum	
Voice Coil Inductance	0.13 mH	
Force Factor (Bl)	1.9 Tm	
Linear Excursion (Xmax)	0.004 in [0.1 mm]	
Sensitivity (SPL)	85.0 dB W/m	
Operating Power (PE)	50 W	

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice



**Rockford Fosgate**

PART No.:	SPEC-34	PART NAME:	3.5" SPEC Two-Way Speaker
RELEASE:	SPEC-38	TOLERANCE:	N/A
	#1 (12-10-90)	DRWN BY:	BLU
		SCALE:	N.T.S.
		APPR BY:	Chad





# Rockford Fosgate

PART NAME: 4" SPEC Two Way Speaker

TOLERANCE: N/A SCALE: N.T.S.

DRWN BY: *BLU* APPR BY: *Chuck*

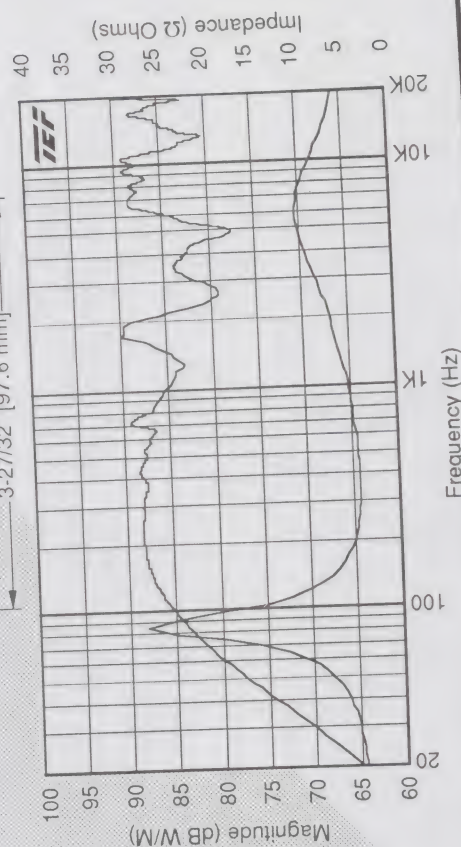
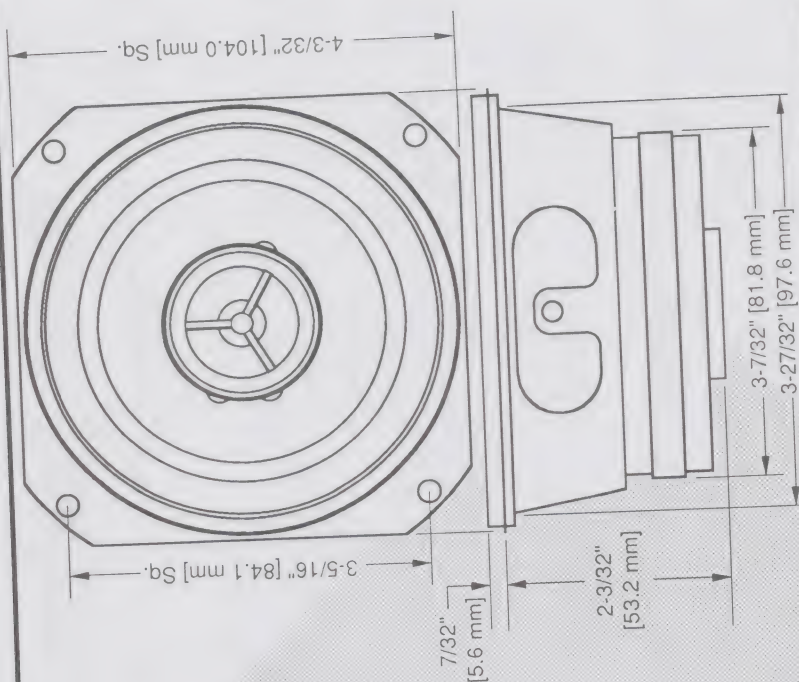
PART No.: SPEC-44

SPEC-48

RELEASE: #1 (12-4-90)

TECHNICAL DATA	SPEC-44	SPEC-48
Nominal Diameter	4.00" [101.6 mm]	Not Available
Magnet Weight	5.97 oz [169.3 g]	At This Time
Frequency Range	84 - 20,000 Hz	
Nominal Impedance	4Ω	
DC Resistance (RE)	3.9Ω	
Resonance Frequency (fs)	84 Hz	
Mechanical Q Factor (QMS)	3.83	
Electrical Q Factor (QES)	0.57	
Total Q Factor (QTS)	0.50	
Effective Cone Area (SD)	9.15 in <sup>2</sup> [0.0059 m <sup>2</sup> ]	
Equivalent Air Volume (VAS)	0.106 ft <sup>3</sup> [3.0 L]	
Compliance (CMS)	0.00069 m/N	
Moving Mass (MMS)	0.18 oz [5.2 g]	
Voice Coil Diameter	1.00 in [25.4 mm]	
Voice Coil Winding Height	0.31 in [7.8 mm]	
Voice Coil Former Material	3.5 Mil Aluminum	
Voice Coil Inductance	0.26 mH	
Force Factor (Bl)	4.3 Tm	
Linear Excursion (Xmax)	0.03 in [0.8 mm]	
Sensitivity (SPL)	87.0 dB W/m	
Operating Power (PE)	50 W	

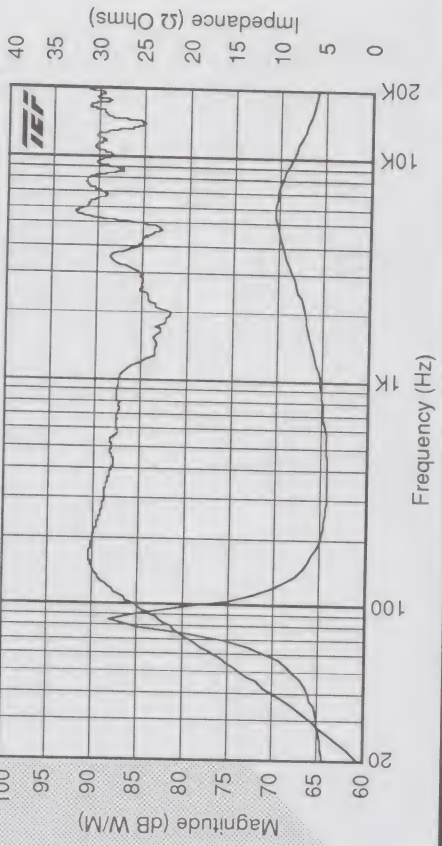
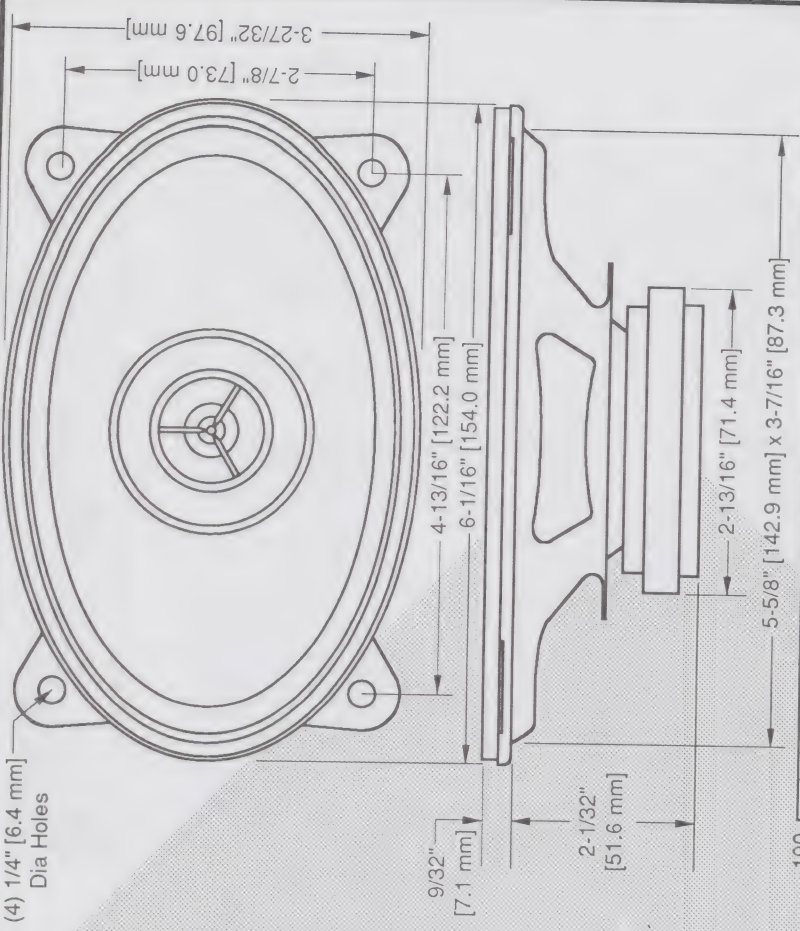
Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice





TECHNICAL DATA	SPEC-464	SPEC-468
Nominal Diameter	4x6" in [101.6x152.4 mm]	Not Available
Magnet Weight	9.60 oz [272.6 g]	At This Time
Frequency Range	150 - 20,000 Hz	
Nominal Impedance	4Ω	
DC Resistance (RE)	4.0Ω	
Resonance Frequency (fs)	150 Hz	
Mechanical Q Factor (QMS)	4.17	
Electrical Q Factor (QES)	1.56	
Total Q Factor (QTS)	1.14	
Effective Cone Area (Sd)	20.77 in^2 [0.0134 m^2]	
Equivalent Air Volume (Vas)	0.071 ft^3 [2.0 L]	
Compliance (CMS)	0.00009 m/N	
Moving Mass (MMS)	0.46 oz [13.1 g]	
Voice Coil Diameter	1.00 in [25.4 mm]	
Voice Coil Winding Height	0.31 in [7.9 mm]	
Voice Coil Former Material	3.5 Mil Aluminum	
Voice Coil Inductance	0.29 mH	
Force Factor (Bl)	5.6 Tm	
Linear Excursion (Xmax)	0.06 in [1.5 mm]	
Sensitivity (SPL)	90.0 dB W/m	
Operating Power (PE)	50 W	

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice

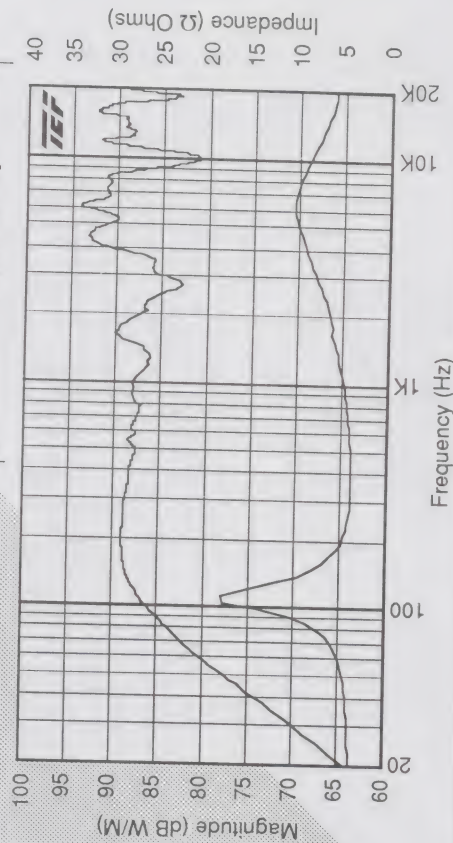
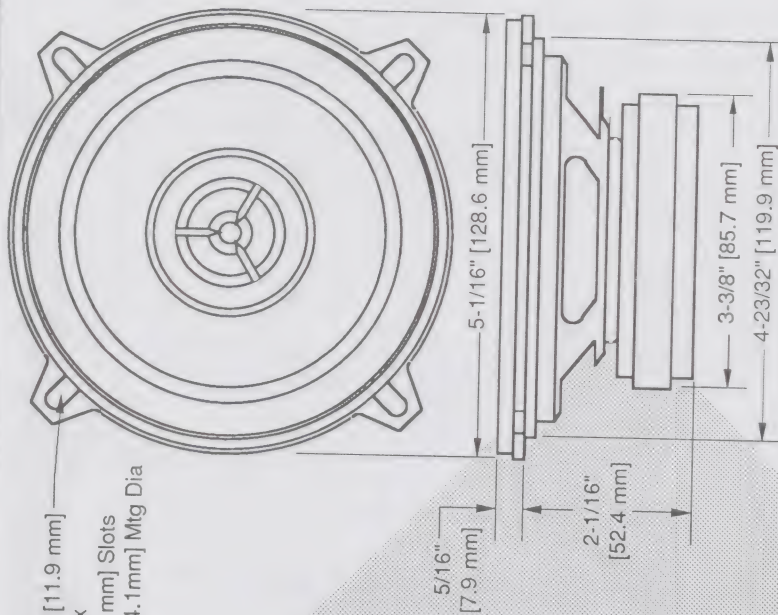


Rockford Fosgate

PART No:	SPEC-464	PART NAME:	4x6" SPEC Two Way Speaker
RELEASE:	#1 (12-3-90)	TOLERANCE:	N/A
		SCALE:	N.T.S.
		DRWN BY:	ESU
		APPR BY:	Chund



TECHNICAL DATA	SPEC-54	SPEC-58
Nominal Diameter	5.25 in [133.4 mm]	Not Available
Magnet Weight	9.42 oz [267.5 g]	At This Time
Frequency Range	103 - 20,000	
Nominal Impedance	4Ω	
DC Resistance (RE)	3.7Ω	
Resonance Frequency (fs)	103 Hz	
Mechanical Q Factor (QMS)	3.56	
Electrical Q Factor (QES)	0.85	
Total Q Factor (QTS)	0.68	
Effective Cone Area (Sd)	14.11 in <sup>2</sup> [0.0091 m <sup>2</sup> ]	
Equivalent Air Volume (Vas)	0.141 ft <sup>3</sup> [4.0 L]	
Compliance (CMS)	0.00032 m/N	
Moving Mass (MMS)	0.26 oz [7.4 g]	
Voice Coil Diameter	1.00 in [25.4 mm]	
Voice Coil Winding Height	0.40 in [10.3 mm]	
Voice Coil Former Material	3.5 Mil Aluminum	
Voice Coil Inductance	0.28 mH	
Force Factor (Bl)	4.6 Tm	
Linear Excursion (Xmax)	0.11 in [2.7 mm]	
Sensitivity (SPL)	89.0 dB W/m	
Operating Power (PE)	50 W	
Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice		



**Rockford Fosgate**

PART NAME: 5.25" SPEC Two Way Speaker

TOLERANCE: N/A SCALE: N.T.S.

DRWN BY: *BBW* APPR BY: *Chud*

PART No.: SPEC-54

SPEC-58

RELEASE: #1 (12-10-90)

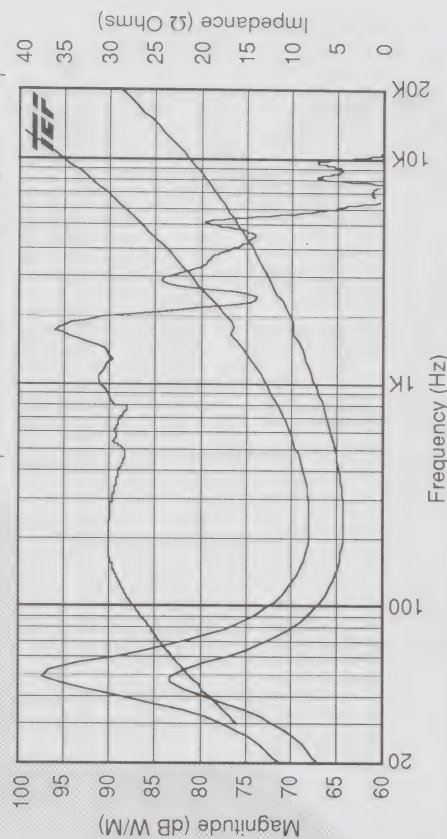
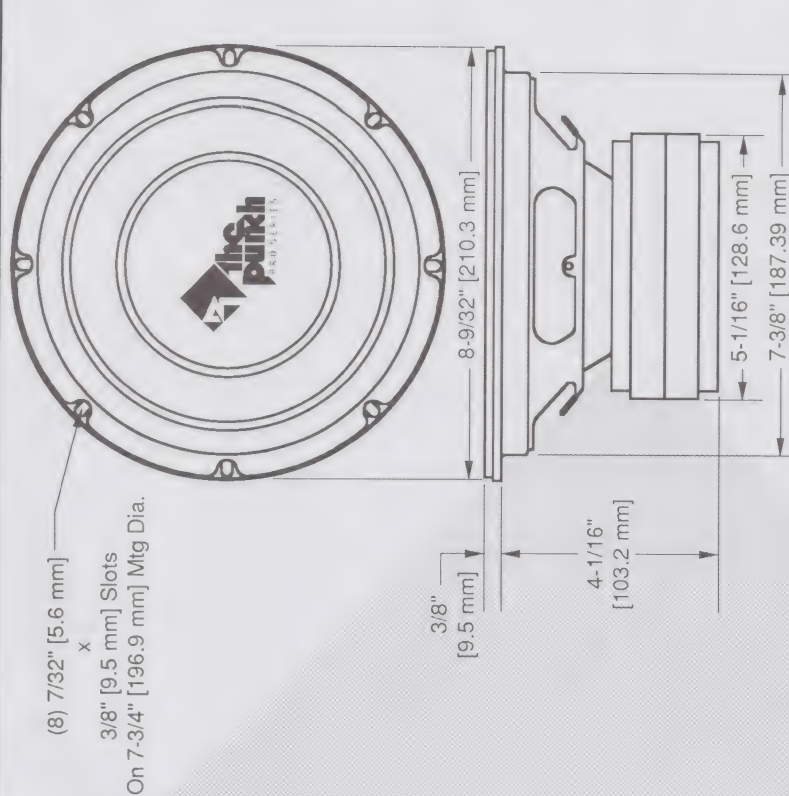






TECHNICAL DATA	SPP-84	SPP-88
Nominal Diameter	8.00 in [203.2 mm]	8.00 in [203.2 mm]
Magnet Weight	60.00 oz [1701.0 g]	60.00 oz [1701.0 g]
Frequency Range	39 - Hz	44 - Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.5Ω	7.9Ω
Resonance Frequency (fs)	39 Hz	44 Hz
Mechanical Q Factor (Qms)	2.03	2.12
Electrical Q Factor (Qes)	0.35	0.47
Total Q Factor (Qts)	0.30	0.39
Effective Cone Area (Sd)	35.81 in <sup>2</sup> [0.0231 m <sup>2</sup> ]	35.81 in <sup>2</sup> [0.0231 m <sup>2</sup> ]
Equivalent Air Volume (Vas)	1.236 ft <sup>3</sup> [35.0 L]	1.236 ft <sup>3</sup> [35.0 L]
Compliance (Cms)	0.00046 m/N	0.00046 m/N
Moving Mass (Mms)	1.25 oz [35.5 g]	0.98 oz [27.8 g]
Voice Coil Diameter	2.00 in [50.8 mm]	2.00 in [50.8 mm]
Voice Coil Winding Height	0.72 in [18.3 mm]	0.72 in [18.3 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	0.81 mH	1.10 mH
Force Factor (Bl)	9.3 Tm	11.4 Tm
Linear Excursion (Xmax)	0.17 in [4.3 mm]	0.17 in [4.3 mm]
Sensitivity (SPL)	90.0 dB W/m	90.0 dB W/m
Operating Power (Pe)	150 W	150 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



**Rockford Fosgate**

PART NAME: 8" Pro Woofer

PART No.: SPP-84

TOLERANCE: N/A SCALE: N.T.S.

PART No.: SPP-88

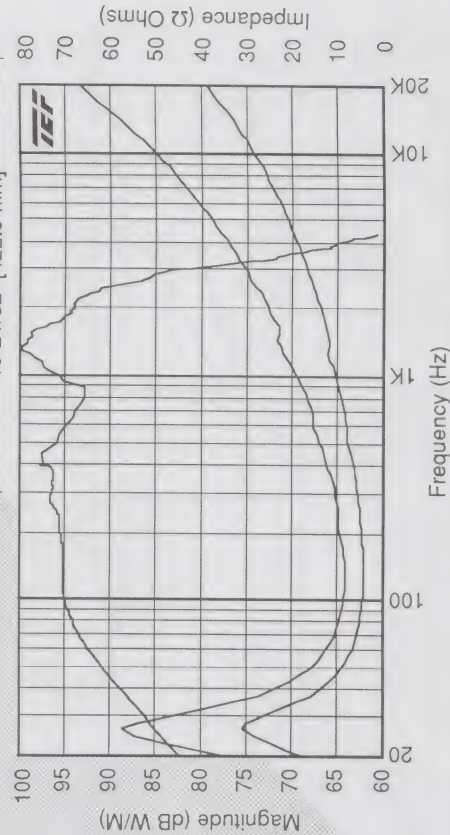
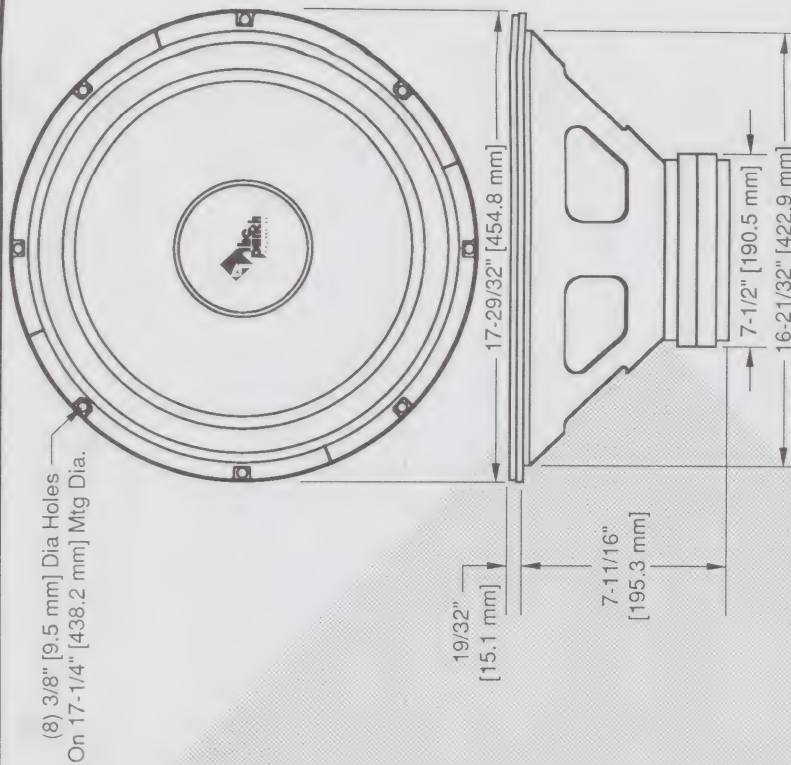
DRWN BY: *BBW* APPR BY: *huck*

RELEASE: #1 (12-4-90)



TECHNICAL DATA	SPP-184	SPP-188
Nominal Diameter	18.00 in [457.2 mm]	18.00 in [457.2 mm]
Magnet Weight	156.00 oz [4430.4 g]	156.00 oz [4430.4 g]
Frequency Range	27 - 2,500 Hz	28 - 2,500 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.5Ω	7.1Ω
Resonance Frequency (fs)	27 Hz	28 Hz
Mechanical Q Factor (QMS)	2.37	2.85
Electrical Q Factor (QES)	0.30	0.38
Total Q Factor (QTS)	0.27	0.34
Effective Cone Area (Sp)	176.86 in <sup>2</sup> [0.1141 m <sup>2</sup> ]	176.86 in <sup>2</sup> [0.1141 m <sup>2</sup> ]
Equivalent Air Volume (Vas)	12.470 ft <sup>3</sup> [353.0 L]	12.470 ft <sup>3</sup> [353.0 L]
Compliance (Cms)	0.00019 m/N	0.00019 m/N
Moving Mass (Mms)	6.43 oz [182.2 g]	5.80 oz [164.3 g]
Voice Coil Diameter	3.00 in [76.2 mm]	3.00 in [76.2 mm]
Voice Coil Winding Height	0.97 in [24.6 mm]	0.98 in [24.9 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	1.05 mH	1.92 mH
Force Factor (Bl)	19.1 Tm	23.3 Tm
Linear Excursion (Xmax)	0.24 in [6.0 mm]	0.24 in [6.0 mm]
Sensitivity (SPL)	95.0 dB W/m	95.0 dB W/m
Operating Power (Pe)	300 W	300 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



**Rockford Fosgate**

PART NAME: 18" Pro Woofer

PART NO.: SPP-184

TOLERANCE: N/A

RELEASE: #1 (12-10-90)

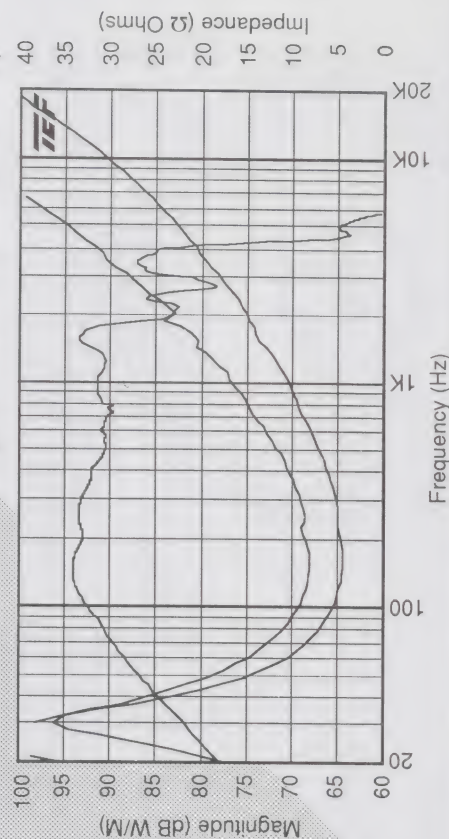
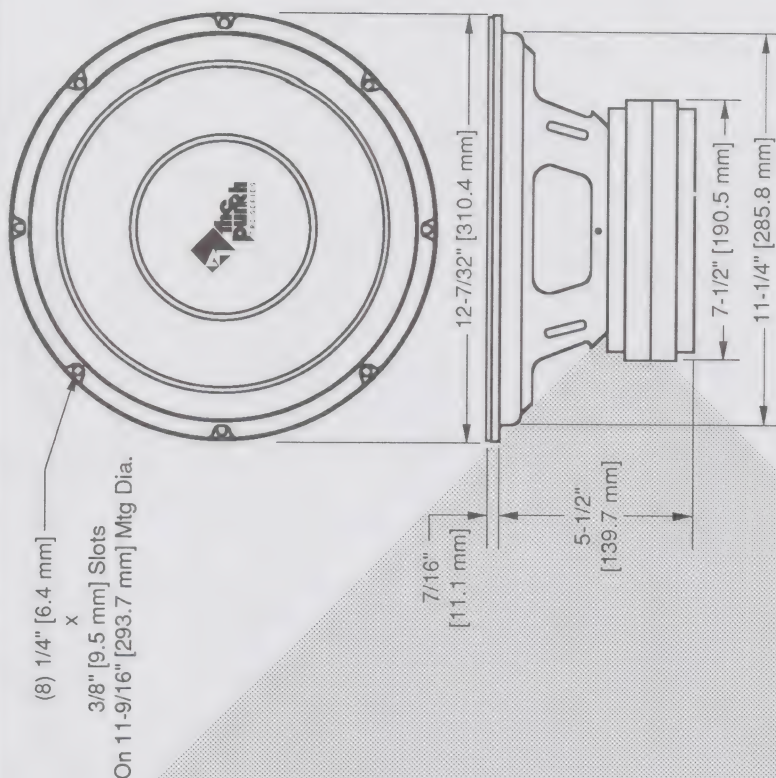
SCALE: N.T.S.

DRWN BY: *BSW*

APPR BY: *Chunt*



TECHNICAL DATA	SPP-124	SPP-128
Nominal Diameter	12.00 in [304.8 mm]	12.00 in [304.8 mm]
Magnet Weight	156.00 oz [4430.4 g]	156.00 oz [4430.4 g]
Frequency Range	31 - 2,500 Hz	32 - 2,500 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.5Ω	7.0Ω
Resonance Frequency (fs)	31 Hz	32 Hz
Mechanical Q Factor (Qms)	2.17	2.15
Electrical Q Factor (Qes)	0.23	0.30
Total Q Factor (Qts)	0.21	0.27
Effective Cone Area (Sd)	84.48 in <sup>2</sup> [0.0545 m <sup>2</sup> ]	84.48 in <sup>2</sup> [0.0545 m <sup>2</sup> ]
Equivalent Air Volume (Vas)	2.967 ft <sup>3</sup> [84.0 L]	2.967 ft <sup>3</sup> [84.0 L]
Compliance (Cms)	0.00020 m/N	0.00020 m/N
Moving Mass (Mms)	4.64 oz [131.6 g]	4.64 oz [131.6 g]
Voice Coil Diameter	3.00 in [76.2 mm]	3.00 in [76.2 mm]
Voice Coil Winding Height	0.99 in [25.1 mm]	0.99 in [25.1 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	1.12 mH	1.73 mH
Force Factor (Bl)	19.7 Tm	23.9 Tm
Linear Excursion (Xmax)	0.24 in [6.2 mm]	0.24 in [6.2 mm]
Sensitivity (SPL)	92 dB W/m	92 dB W/m
Operating Power (PE)	200 W	200 W
Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit		



**Rockford Fosgate**

PART NAME: 12" Pro Woofer

TOLERANCE: N/A SCALE: N.T.S.

DRWN BY: *ESW* APPR BY: *Chuck*

PART NO.: SPP-124

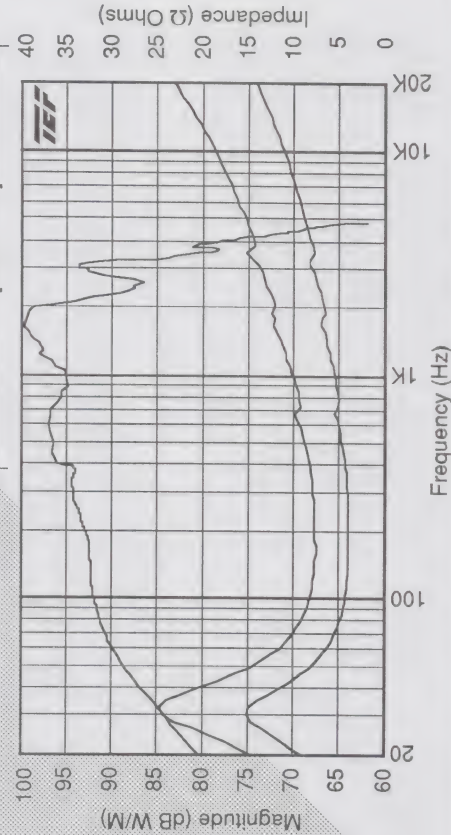
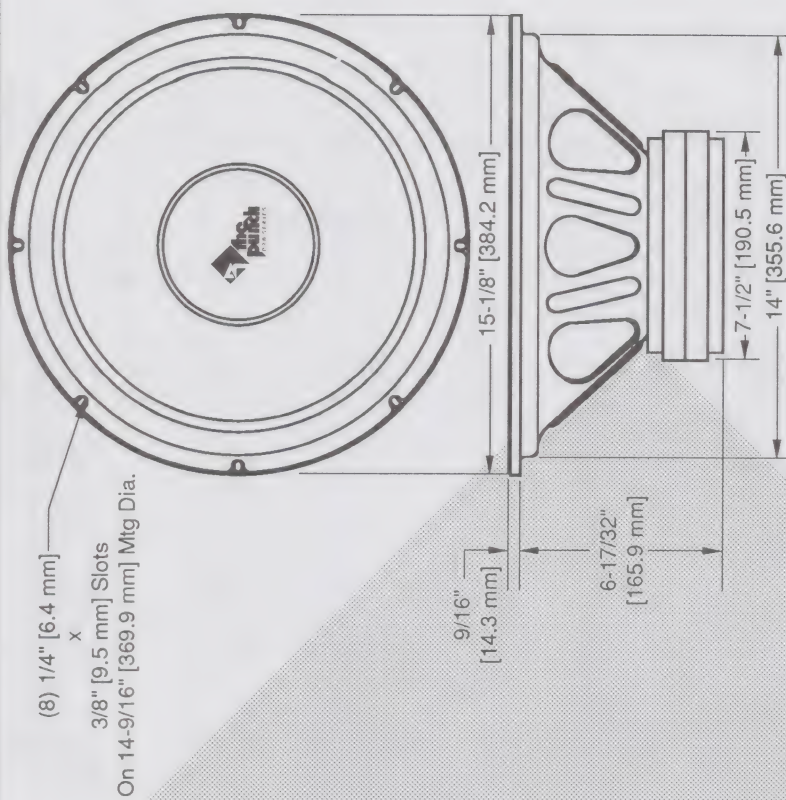
SPP-128

RELEASE: #1 (11-27-90)



TECHNICAL DATA	SPP-154	SPP-158
Nominal Diameter	15.00 in [381.0 mm]	15.00 in [381.0 mm]
Magnet Weight	156.00 oz [4430.4 g]	156.00 oz [4430.4 g]
Frequency Range	30 - 3,500 Hz	30 - 3,500 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.6Ω	7.1Ω
Resonance Frequency (fs)	30 Hz	31 Hz
Mechanical Q Factor (QMS)	1.74	1.54
Electrical Q Factor (QES)	0.52	0.56
Total Q Factor (QTS)	0.40	0.42
Effective Cone Area (SD)	134.54 in <sup>2</sup> [0.0868 m <sup>2</sup> ]	134.54 in <sup>2</sup> [0.0868 m <sup>2</sup> ]
Equivalent Air Volume (VAS)	9.289 ft <sup>3</sup> [235.0 L]	9.289 ft <sup>3</sup> [235.0 L]
Compliance (CMS)	0.00022 m/N	0.00022 m/N
Moving Mass (MMS)	4.50 oz [127.7 g]	4.22 oz [119.7 g]
Voice Coil Diameter	3.00 in [76.2 mm]	3.00 in [76.2 mm]
Voice Coil Winding Height	0.73 in [18.5 mm]	0.73 in [18.5 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	0.33 mH	0.59 mH
Force Factor (BI)	12.8 Tm	17.0 Tm
Linear Excursion (Xmax)	0.15 in [3.8 mm]	0.15 in [3.8 mm]
Sensitivity (SPL)	93.0 dB W/m	93.0 dB W/m
Operating Power (PE)	200 W	200 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



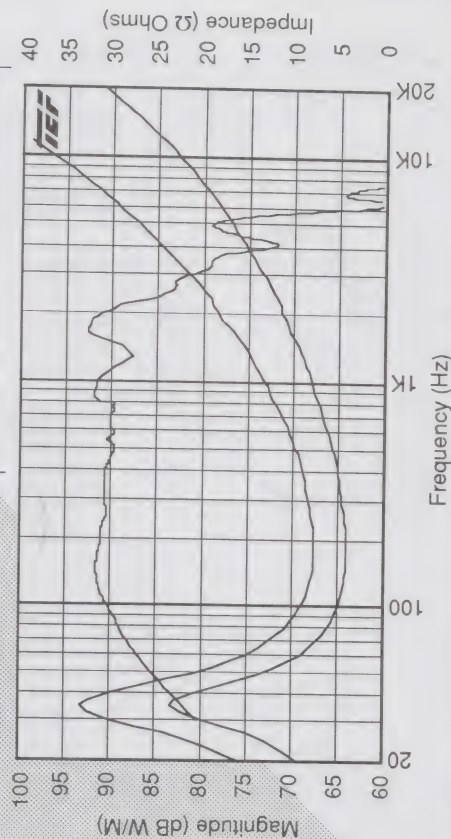
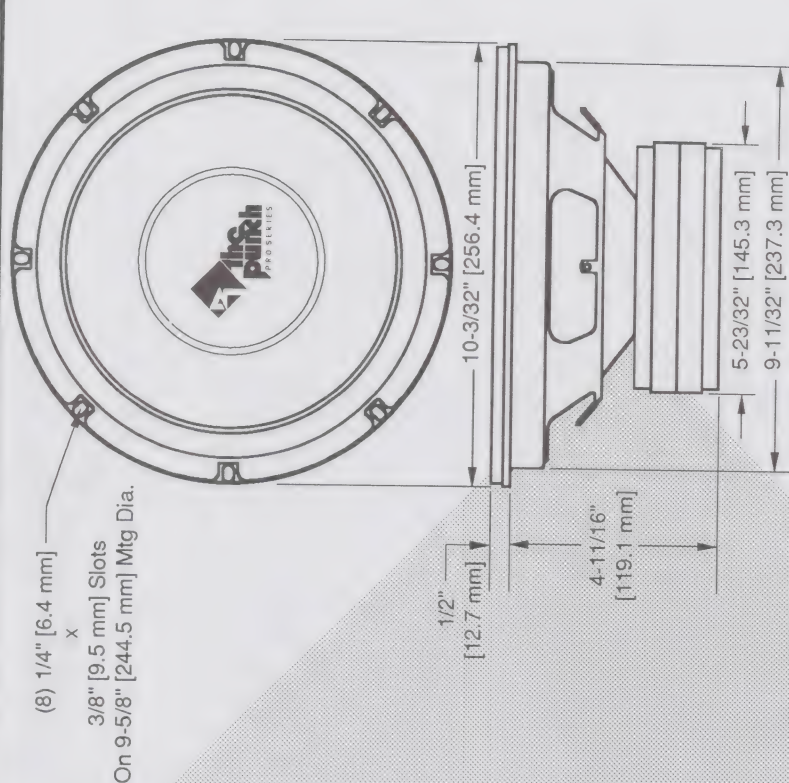
**Rockford Fosgate**

PART No.: SPP-154	PART NAME: 15" Pro Woofer
SPP-158	TOLERANCE: N/A
RELEASE: #2 (10-29-90)	SCALE: N.T.S.
	DRWN BY: <i>RBW</i>
	APPR BY: <i>Glenn</i>



TECHNICAL DATA	SPP-104	SPP-108
Nominal Diameter	10.00 in [254.0 mm]	10.00 in [254.0 mm]
Magnet Weight	64.00 oz [1814.4 g]	64.00 oz [1814.4 g]
Frequency Range	34 - Hz	35 - Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.3Ω	6.6Ω
Resonance Frequency (fs)	34 Hz	35 Hz
Mechanical Q Factor (Qms)	2.15	1.84
Electrical Q Factor (Qes)	0.32	0.47
Total Q Factor (Qts)	0.28	0.38
Effective Cone Area (Sd)	55.49 in <sup>2</sup> [0.0358 m <sup>2</sup> ]	55.49 in <sup>2</sup> [0.0358 m <sup>2</sup> ]
Equivalent Air Volume (Vas)	2.401 ft <sup>3</sup> [68.0 L]	2.401 ft <sup>3</sup> [68.0 L]
Compliance (Cms)	0.00037 m/N	0.00037 m/N
Moving Mass (Mms)	2.06 oz [58.5 g]	1.95 oz [55.3 g]
Voice Coil Diameter	2.50 in [63.5 mm]	2.50 in [63.5 mm]
Voice Coil Winding Height	0.78 in [19.8 mm]	0.78 in [19.8 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	0.76 mH	1.18 mH
Force Factor (Bl)	11.4 Tm	13.0 Tm
Linear Excursion (Xmax)	0.20 in [5.1 mm]	0.20 in [5.1 mm]
Sensitivity (SPL)	91.0 dB W/m	91.0 dB W/m
Operating Power (PE)	150 W	150 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



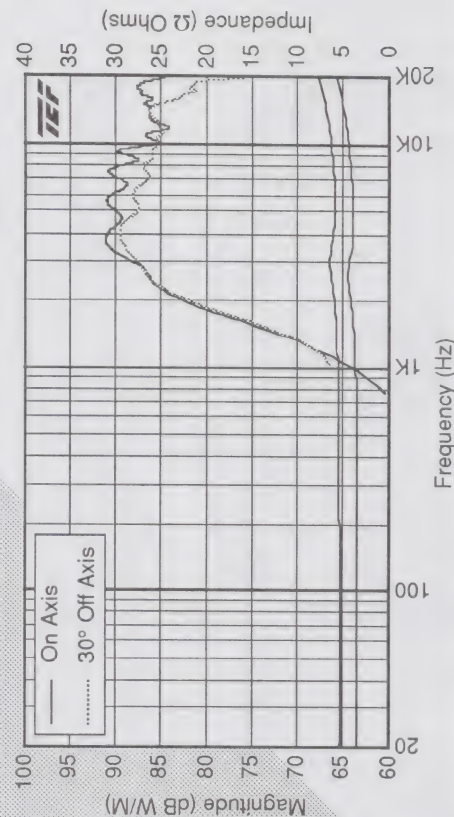
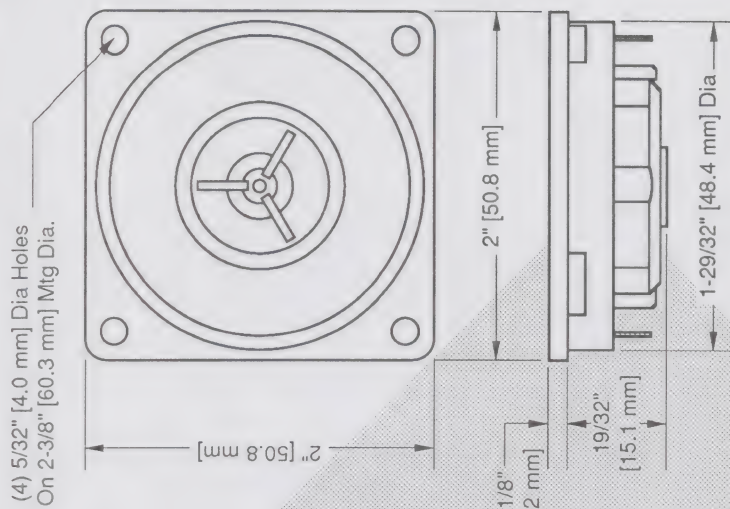
**Rockford Fosgate**

PART No.: SPP-104	PART NAME: 10" Pro Woofer
RELEASE: #1 (12-4-90)	TOLERANCE: N/A
	SCALE: N.T.S.
	DRWN BY: <i>BBW</i>
	APPR BY: <i>Chund</i>



TECHNICAL DATA	SPT-4	SPT-8
Nominal Diameter	0.75 in [19.1 mm]	0.75 in [19.1 mm]
Magnet Weight	0.60 oz [17.0 g]	0.60 oz [17.0 g]
Frequency Range	3,000 - 20,000 Hz	3,000 - 20,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.5Ω	5.5Ω
Resonance Frequency (fs)	2,600 Hz	2,900 Hz
Mechanical Q Factor (QMS)	1.33	1.63
Electrical Q Factor (QES)	4.94	8.13
Total Q Factor (QTS)	1.05	1.35
Effective Cone Area (Sd)	N/A	N/A
Equivalent Air Volume (Vas)	N/A	N/A
Compliance (CMS)	N/A	N/A
Moving Mass (MMS)	N/A	N/A
Voice Coil Diameter	0.41 in [10.5 mm]	0.41 in [10.5 mm]
Voice Coil Winding Height	0.07 in [1.9 mm]	0.07 in [1.9 mm]
Voice Coil Former Material	None	None
Voice Coil Inductance	0.07 mH	0.09 mH
Force Factor (Bl)	N/A	N/A
Linear Excursion (Xmax)	N/A	N/A
Sensitivity (SPL)	91.3 dB W/m	91.3 dB W/m
Operating Power (PE)	40 W *	40 W *

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
 \* Power Ratings (PE) Established With Recommended Filter Network  
 Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
 Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



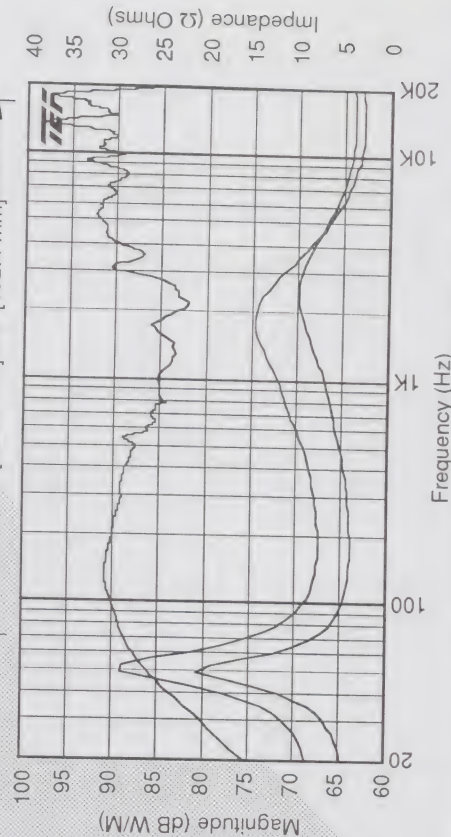
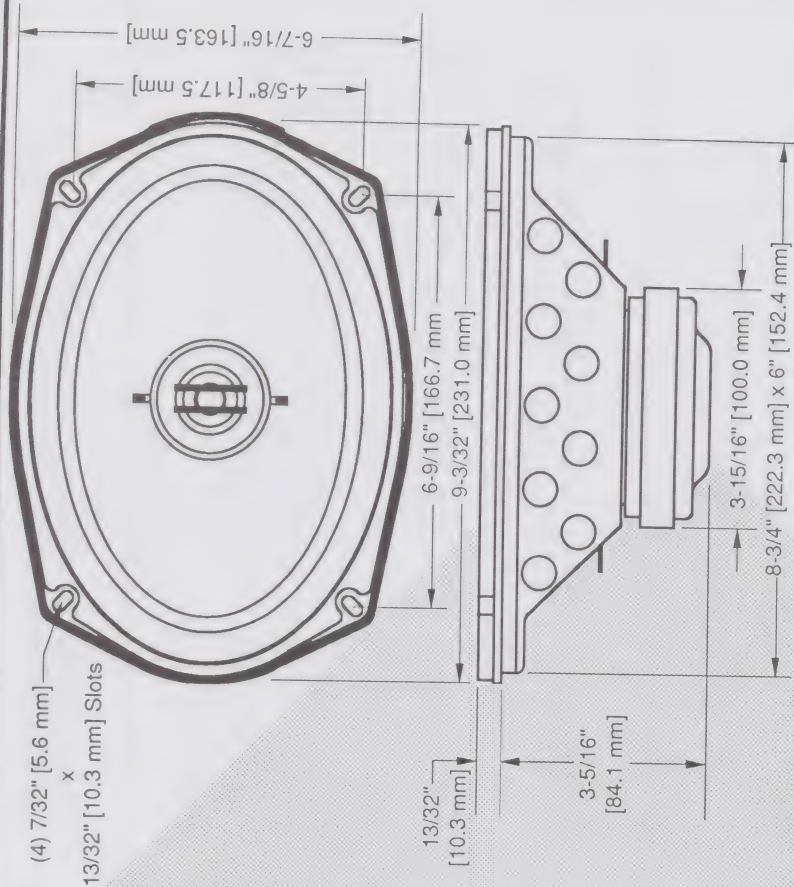
Rockford Fosgate

PART NO.: SPT-4	PART NAME: 3/4" Hard Dome Tweeter
SPT-8	TOLERANCE: N/A
RELEASE: #2 (10-26-90)	SCALE: N.T.S.
	APP BY: <i>Chad</i>



TECHNICAL DATA	SPPR-694CX	SPPR-698CX
Nominal Diameter	6x9 in [152.4x228.6 mm]	6x9 in [152.4x228.6 mm]
Magnet Weight	14.00 oz [397.6 g]	14.00 oz [397.6 g]
Frequency Range	44 - 20,000 Hz	50 - 20,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.6Ω	7.2Ω
Resonance Frequency (fs)	44 Hz	50 Hz
Mechanical Q Factor (QMs)	2.98	2.96
Electrical Q Factor (QEs)	0.64	0.87
Total Q Factor (QTs)	0.53	0.67
Effective Cone Area (Sd)	33.64 in <sup>2</sup> [0.0217 m <sup>2</sup> ]	33.64 in <sup>2</sup> [0.0217 m <sup>2</sup> ]
Equivalent Air Volume (VAs)	1.554 ft <sup>3</sup> [44.0 L]	1.554 ft <sup>3</sup> [44.0 L]
Compliance (CMS)	0.00067 m/N	0.00067 m/N
Moving Mass (Mms)	0.69 oz [19.6 g]	0.54 oz [15.2 g]
Voice Coil Diameter	1.50 in [38.1 mm]	1.50 in [38.1 mm]
Voice Coil Winding Height	0.51 in [12.9 mm]	0.51 in [12.9 mm]
Voice Coil Former Material	5 Mil Aluminum	5 Mil Aluminum
Voice Coil Inductance	0.42 mH	0.29 mH
Force Factor (Bl)	5.5 Tm	6.3 Tm
Linear Excursion (Xmax)	0.13 in [3.3 mm]	0.13 in [3.3 mm]
Sensitivity (SPL)	90.0 dB W/m	90.0 dB W/m
Operating Power (PE)	70 W	70 W

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit



Rockford Fosgate

PART No.: SPPR-694CX

PART NAME: 6x9" Series One Two Way Speaker

TOLERANCE: N/A

SCALE: N.T.S.

RELEASE: #2 (10-29-90)

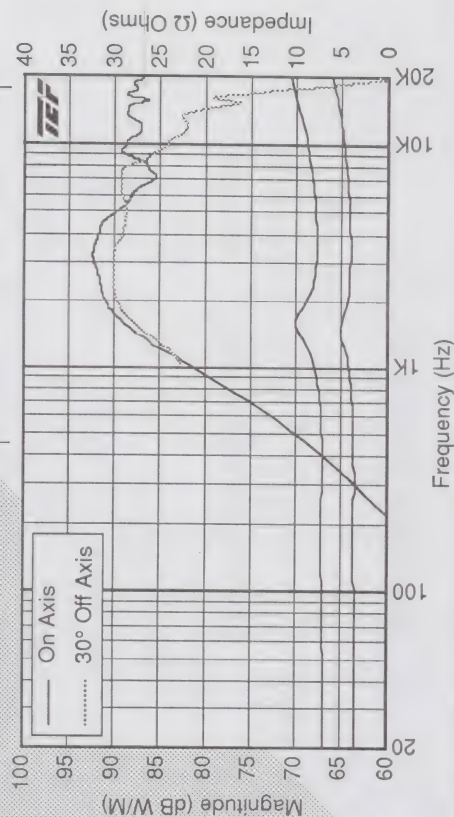
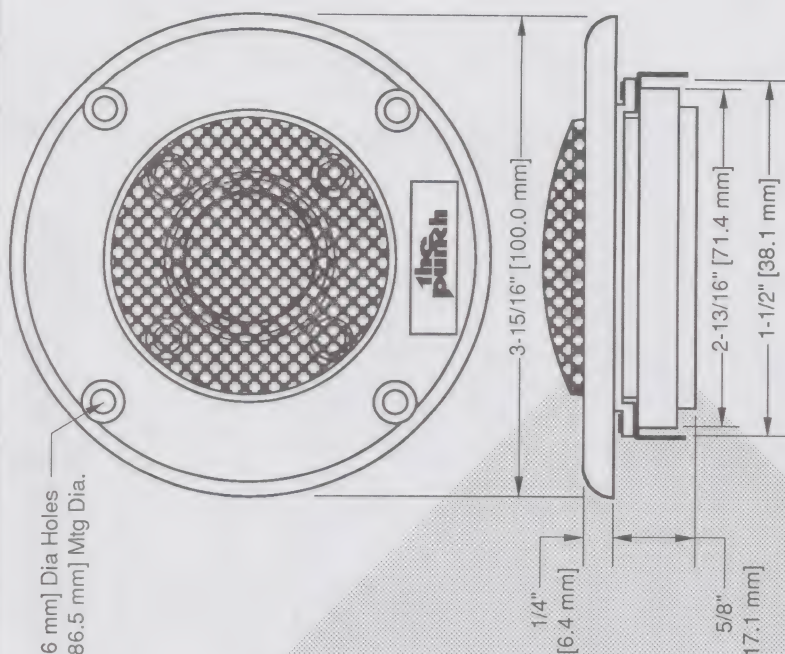
APPR BY: *Chmel*



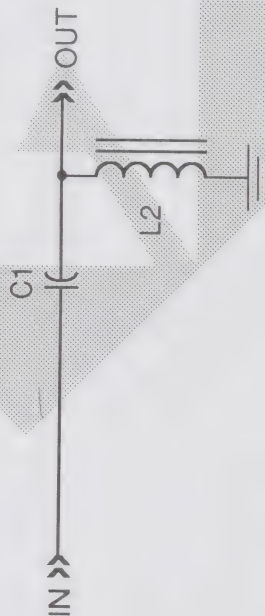
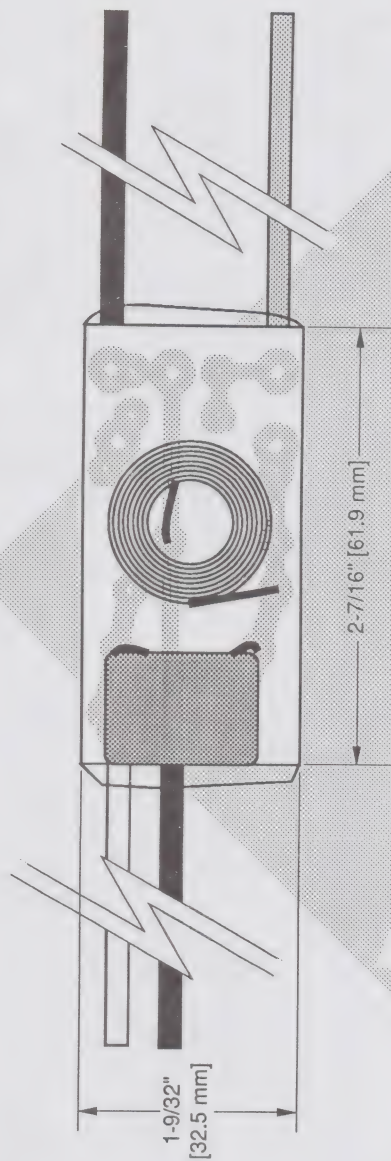
TECHNICAL DATA	SPT-14R	SPT-18R
Nominal Diameter	1.00 in [25.4 mm]	1.00 in [25.4 mm]
Magnet Weight	4.80 oz [136.2 g]	4.80 oz [136.2 g]
Frequency Range	2,500 - 20,000 Hz	2,500 - 20,000 Hz
Nominal Impedance	4Ω	8Ω
DC Resistance (RE)	3.3Ω	6.6Ω
Resonance Frequency (fs)	1,300 Hz	1,300 Hz
Mechanical Q Factor (QMS)	1.49	2.10
Electrical Q Factor (QES)	3.92	4.02
Total Q Factor (QTS)	1.08	1.34
Effective Cone Area (Sd)	N/A	N/A
Equivalent Air Volume (VAs)	N/A	N/A
Compliance (CMS)	N/A	N/A
Moving Mass (MMS)	N/A	N/A
Voice Coil Diameter	1.00 in [25.4 mm]	1.00 in [25.4 mm]
Voice Coil Winding Height	0.14 in [3.5 mm]	0.14 in [3.5 mm]
Voice Coil Former Material	2 Mil Polyimide Film	2 Mil Polyimide Film
Voice Coil Inductance	0.30 mH	0.37 mH
Force Factor (Bl)	N/A	N/A
Linear Excursion (Xmax)	N/A	N/A
Sensitivity (SPL)	88.0 dB W/m	88.0 dB W/m
Operating Power (PE)	50 W *	50 W *

Specifications May Vary Per Manufacturing Tolerances And Are Subject To Improvement Without Notice  
 \* Power Ratings (PE) Established With Recommended Filler Network  
 Frequency Response Curve Shown Represents Both 4Ω And 8Ω Units  
 Upper Impedance Curve For 8Ω Unit; Lower Impedance Curve For 4Ω Unit

PART No.:	SPT-14R	PART NAME:	1" Punch Soft Dome Tweeter
RELEASE:	#2 (10-26-90)	TOLERANCE:	N/A
		SCALE:	N.T.S.
		DRWN BY:	ESW
		APPR BY:	Clum





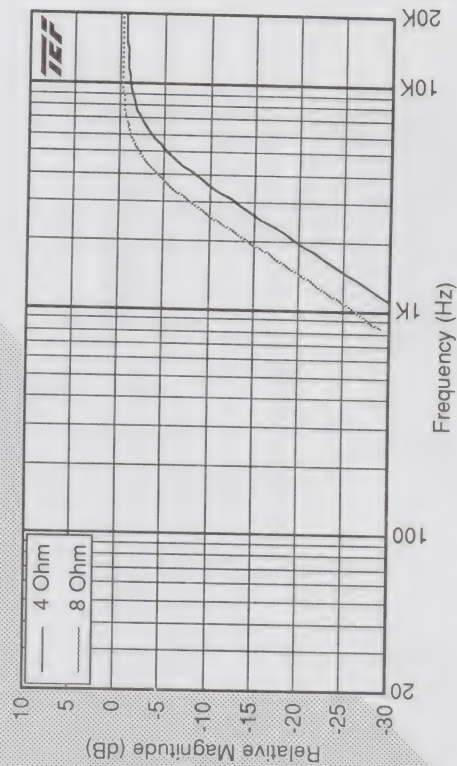


#### TX-124 Component Values:

C1 ... 4.7  $\mu$ F, 100 V Mylar  
L1 ... .16 mH, 40  $\Omega$  DCR

#### TX-128 Component Values:

C1 ... 3.3  $\mu$ F, 100 V Mylar  
L1 ... .34 mH, 60  $\Omega$  DCR



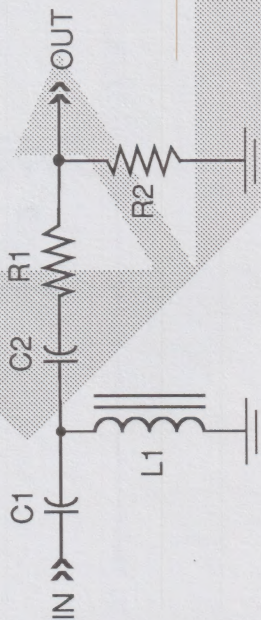
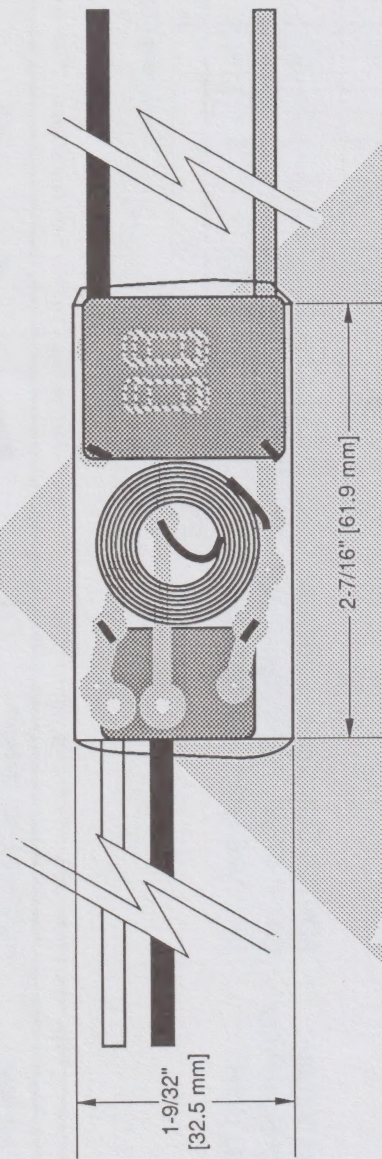
Specifications May Vary Per Manufacturing Tolerances And Are Subject To Change Without Notice

0dB Reference Equal To Filter Input Signal Level... Filter Networks Terminated With Resistive Loads

PART No.:	TX-124	PART NAME: Highpass Filter Network	
	TX-128	TOLERANCE: N/A	SCALE: N.T.S.
RELEASE: #1 (10-29-90)		DRWN BY: <i>BLW</i>	APPR BY: <i>Chenel</i>





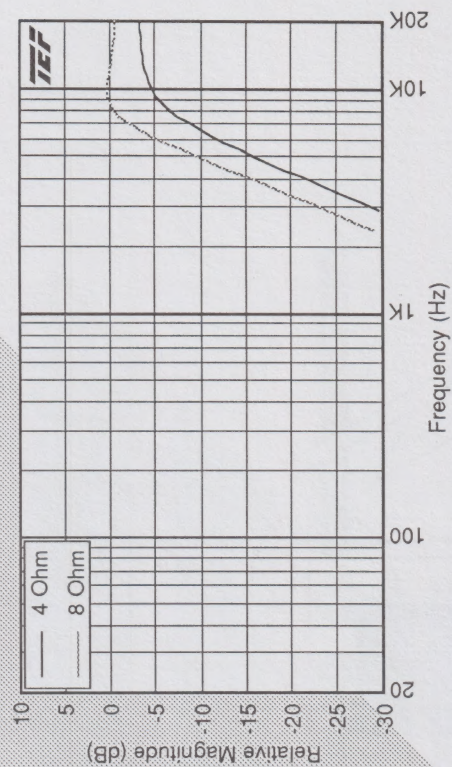


#### TX-184 Component Values:

C1 ... 3.3  $\mu$ F, 100 V Mylar  
 C2 ... 10  $\mu$ F, 100 V Mylar  
 L1 ... .06 mH, .13  $\Omega$  DCR  
 R1 ... 1  $\Omega$ , 1 Watt  
 R2 ... 12  $\Omega$ , 1 Watt

#### TX-188 Component Values:

C1 ... 3.3  $\mu$ F, 100 V Mylar  
 C2 ... 4.7  $\mu$ F, 100 V Mylar  
 L1 ... .09 mH, .16  $\Omega$  DCR  
 R1 ... N/A  
 R2 ... N/A



Specifications May Vary Per Manufacturing Tolerances And Are Subject To Change Without Notice

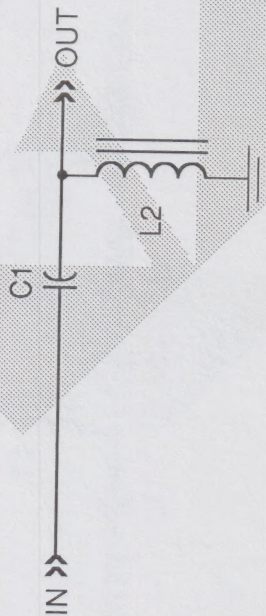
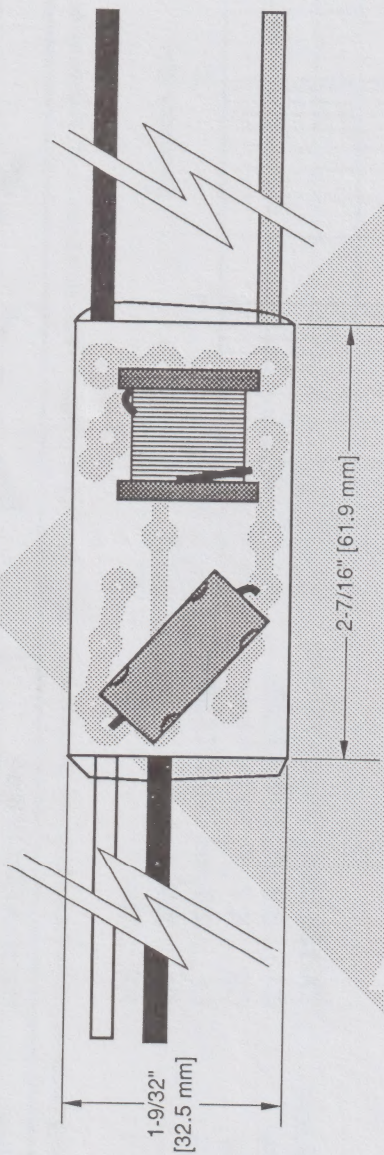
0dB Reference Equal To Filter Input Signal Level... Filter Networks Terminated With Resistive Loads

PART NO.:	TX-184	PART NAME: Highpass Filter Network	
	TX-188	TOLERANCE: N/A	SCALE: N.T.S.
RELEASE: #1 (10-29-90)		DRWN BY: <i>BBW</i>	APPR BY: <i>Chad</i>



# Rockford Fosgate



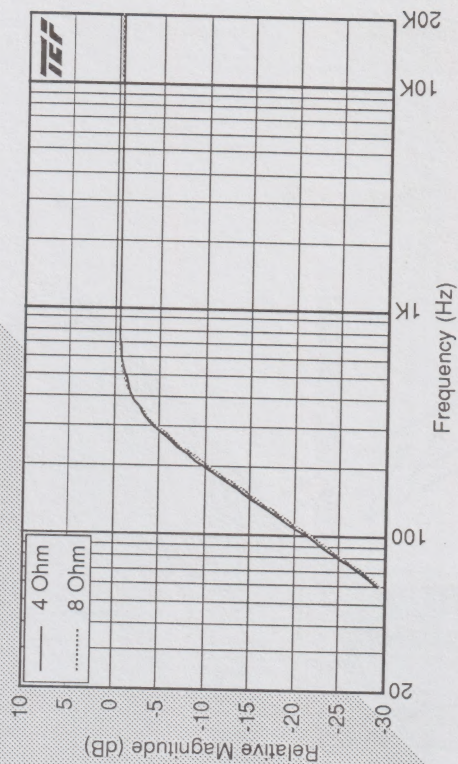


#### MX-124 Component Values:

C1 ... 100  $\mu$ F, 100 V Non-Polar  
L1 ... 2.45 mH, .44  $\Omega$  DCR

#### MX-128 Component Values:

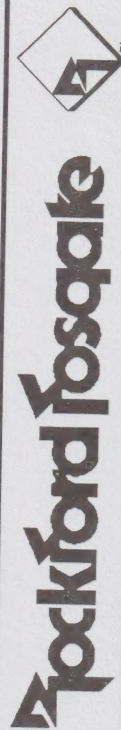
C1 ... 47  $\mu$ F, 100 V Non-Polar  
L1 ... 4.64 mH, 1.00  $\Omega$  DCR



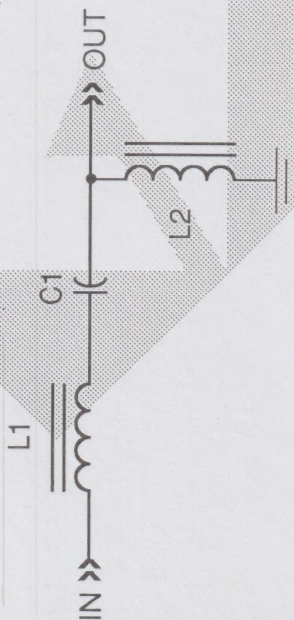
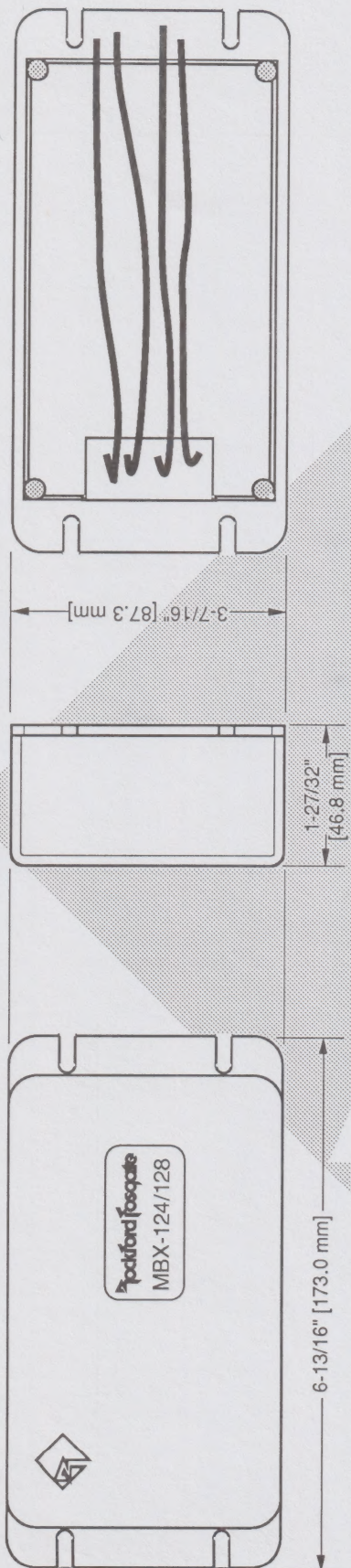
Specifications May Vary Per Manufacturing Tolerances And Are Subject To Change Without Notice

0dB Reference Equal To Filter Input Signal Level...Filter Networks Terminated With Resistive Loads

PART No.:	<b>MX-124</b>	PART NAME:	Highpass Filter Network
RELEASE:	<b>MX-128</b>	TOLERANCE:	N/A
	#1 (10-26-90)	SCALE:	N.T.S.
		DRWN BY:	BLW
		APPR BY:	Chund





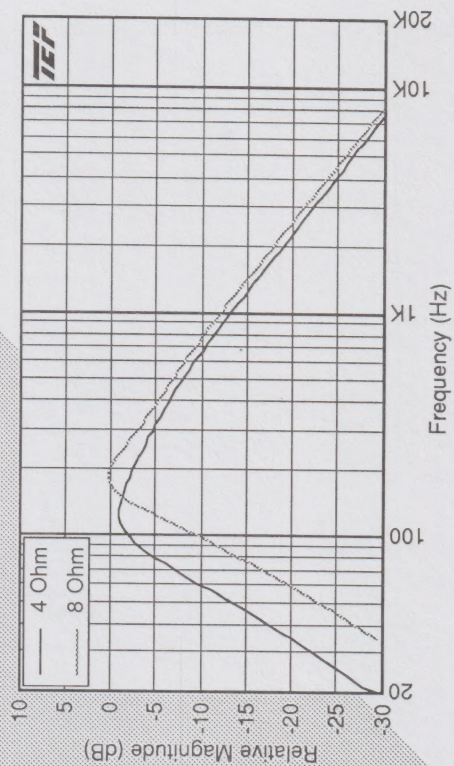


#### MBX-124 Component Values:

L1 ... 2.5 mH, 0.5  $\Omega$  DCR  
L2 ... 7.5 mH, 0.7  $\Omega$  DCR  
C1 ... 330  $\mu$ F, 100 V Non-Polar

#### MBX-128 Component Values:

L1 ... 4.5 mH, 0.5  $\Omega$  DCR  
L2 ... 7.5 mH, 0.7  $\Omega$  DCR  
C1 ... 100  $\mu$ F, 100 V Non-Polar



Specifications May Vary Per Manufacturing Tolerances And Are Subject To Change Without Notice

0dB Reference Equal To Filter Input Signal Level...Filter Networks Terminated With Resistive Loads

PART NO.:	MBX-124	PART NAME: Bandpass Filter Network	
	MBX-128	TOLERANCE: N/A	SCALE: N.T.S.
RELEASE:	#2 (10-29-90)	DRAWN BY: <i>BBW</i>	APPR BY: <i>Chum</i>





